



We certify that Abdelmalek Zine participated in and delivered the talk entitled "Timoshenko Beam, Uniqueness Resultas and Forces Identification" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























Brazil

We certify that Adriano De Cezaro participated in and delivered the talk entitled "On a regularization strategy for simultaneous reconstruction of optical coefficients from QPAT measurements in the radiative transfer regime" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee





2025





















We certify that Adriano De Cezaro participated in and delivered the talk entitled "On a regularization strategy for constrained inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Akshat Kumar participated in and delivered the talk entitled "Discrete microlocal methods" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Aleksei Liubavin participated in and delivered the talk entitled "Source function recovery with asymptotic method for threedimensional R-D-A equations" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Alessandro Benfenati participated in and delivered the talk entitled "Regularization via Latent Diffusion Models for Image Restoration" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Alessandro Benfenati participated in and delivered the talk entitled "Latent Space Techniques for Diffuse Optical Tomography **Inverse Problems**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Alessandro Felisi participated in and delivered the talk entitled "Compressed sensing for photoacoustic tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Alexander Juhani Brian Meaney participated in and delivered the talk entitled "Vectorial Total Variation for Image Reconstruction in Spectral Photon-Counting Detector CBCT" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Alexander Konstantin Denker** participated in and delivered the talk entitled "Iterative Importance Fine-Tuning of Diffusion Models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Alexandre Kawano participated in and delivered the talk entitled "A Fluid-Structure interaction inverse problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Alexandre Kawano** participated in and delivered the talk entitled "Reconstructing Loads in Nanoplates from Dynamic Data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Alfredo lusem participated in and delivered the talk entitled "Levenberg-Marquardt methods for systems of equations with additional convex constraints" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Amal Alghamdi participated in and delivered the talk entitled "Bayesian inversion of CT data to characterize transport in the mouse ear" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Anamika Purohit participated in and delivered the talk entitled "Inverse problem for a time-dependent convection-diffusion equation in admissible geometries" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Anamika Purohit** participated in and delivered the talk entitled "**An** inverse problem for a time-dependent convection-diffusion equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Andrea Aspri** participated in and delivered the talk entitled "Data-Driven Regularization Techniques for Linear Inverse Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Andrea Aspri participated in and delivered the talk entitled "Analysis of Generalized Iteratively Regularized Landweber Iterations driven by data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Andrea Sebastiani participated in and delivered the talk entitled "A Plug-and-Play block proximal heavy ball method for resource constrained scenarios" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Andrea Sebastiani participated in and delivered the talk entitled "Learning from limited data: a Self-Supervised DEQ approach for Sparse-Angle CT Reconstruction" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Andrej Carl Brojatsch participated in and delivered the talk entitled "How to solve inverse elliptic coefficient problems by semidefinite convex optimisation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Andrew Shedlock participated in and delivered the talk entitled "Several Equivalent Source-to-Solution Inverse Problems on Complete Riemannian Manifolds" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Andrew Shedlock** participated in and delivered the talk entitled "An Inverse Problem for Hyperbolic PDEs on Complete Riemannian Manifolds" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Anna Maria Massone** participated in and delivered the talk entitled "Deep Learning for Solar Active Region Classification" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Organizing Committee

























We certify that **Anna Volpara** participated in and delivered the talk entitled "From X-ray Visibilities to Electron Maps: An Inverse Approach with STIX Data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Anson Macdonald participated in and delivered the talk entitled "Convergence Aspects of Hybrid Kernel SVGD" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Antonino Morassi participated in and delivered the talk entitled "Identification of the mass density in a nanoplate from finite eigenvalue data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Antonio Leitao participated in and delivered the talk entitled "A piecewise constant levelset approach for semi-blind deconvolution: Application to barcode decoding" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Antti Kykkänen participated in and delivered the talk entitled "Geometry of gas giants and inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Antti Kykkänen** participated in and delivered the talk entitled "The elastic ray transform" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Audrey Repetti participated in and delivered the talk entitled "Learning Monotone Operators: Application to Inverse Imaging Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Audrey Repetti participated in and delivered the talk entitled "Unfolded proximal neural networks for computation imaging" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Asteroide Santana** participated in and delivered the talk entitled "Math Meets Genomics: Using Optimization to Track Pathogen Variants" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Aurora Poggi participated in and delivered the talk entitled "Datadriven multi-agent modelling of calcium interactions in cell culture" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Barbara Kaltenbacher participated in and delivered the talk entitled "Multicoefficient identification and multiharmonics with the Jordan-Moore-Gibson-Thompson equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Barbara Kaltenbacher participated in and delivered the talk entitled "On Bayesian inference and OED in photoacoustic tomography with fractional attenuation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Barbara Palumbo participated in and delivered the talk entitled "3D reconstruction of solar flare emission" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Bastian Graf Von Harrach-Sammet** participated in and delivered the talk entitled "From inverse coefficient problems to semidefinite optimization" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Benjamin Palacios** participated in and delivered the talk entitled "The inverse photoacoustic tomography problem in fractionally attenuating media" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Benjamin Walder participated in and delivered the talk entitled "Self-Supervised Sparse-Dense Optical Resolution Photoacoustic Microscopy" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Bojan Guzina** participated in and delivered the talk entitled "MECR framework for the characterization of linear viscoelastic solids" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Boya Liu participated in and delivered the talk entitled "Partial data inverse problems for the biharmonic operator with first order perturbation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Boya Liu participated in and delivered the talk entitled "Partial data inverse problem for the semi-linear wave equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Carl Valter Pohjola participated in and delivered the talk entitled "A linearized montonicity method for elastic waves" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Carlos Cardoso Borges participated in and delivered the talk entitled "FFT-Accelerated Inverse Volume Scattering in Three Dimensions Using Continuation in Frequency" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Chandni Thakkar participated in and delivered the talk entitled "Inversion formula and UCP results for the mixed ray transform in 2-D **Euclidean space**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Christian Aarset participated in and delivered the talk entitled "Optimality conditions for sensor placement in OED" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Claudio Estático participated in and delivered the talk entitled "Mild data-driven regularization for brain stroke monitoring via microwave inverse scattering" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Cristiano Arbex Valle participated in and delivered the talk entitled "Optimisation and simulation of portfolios with equities, futures and options" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Daniel Sanz-Alonso** participated in and delivered the talk entitled "Long-time accuracy of ensemble Kalman filters for chaotic and machine-learned dynamical system" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Danilo de Freitas participated in and delivered the talk entitled "Controlled Latent Diffusion Models for 3D Porous **Reconstruction**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Danilo Pezzi participated in and delivered the talk entitled "Learning Variational Models: From Bilevel Optimization to Algorithm Unrolling" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Darko Volkov participated in and delivered the talk entitled "Passive inverse problems: stability and neural network solutions" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that David Villacis participated in and delivered the talk entitled "Bilevel Hyperparameter Learning for Nonsmooth Regularized Imaging and Machine Learning Models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Davide Bianchi participated in and delivered the talk entitled "Unsupervised graphLaNet for imaging applications" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Diana-Elena Mirciu participated in and delivered the talk entitled "Higher order error estimates for regularization of inverse problems under non-additive noise" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Dirk Alfred Lorenz** participated in and delivered the talk entitled "Inexact splitting methods with relative errors" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Dirk Alfred Lorenz** participated in and delivered the talk entitled "How to learn to regularize variationall" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Dmitri Pavlov** participated in and delivered the talk entitled "Path integrals, inverse problems, and functorial field theory" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Dmitrii Chaikovskii** participated in and delivered the talk entitled "Fast coefficient identification in periodic reaction-diffusion-advection models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Douglas Soares Gonçalves** participated in and delivered the talk entitled "Levenberg-Marquardt method with singular scaling for zero residue problems: intuition and results" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee

























We certify that **Douglas Soares Gonçalves** participated in and delivered the talk entitled "Levenberg-Marquardt with singular scaling and applications" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Douglas Soares Gonçalves** participated in and delivered the talk entitled "Local convergence of Levenberg-Marquardt with singular scaling for nonzero residual problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Edoardo Calvello participated in and delivered the talk entitled "Transformers for Data Assimilation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Elena Beretta** participated in and delivered the talk entitled "On the identification of early tumor states in some nonlinear reactiondiffusion models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Elena Loli Piccolomini** participated in and delivered the talk entitled "Stability-Aware Deep Learning Strategies for Image Deblurring under Uncertain Noise" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Elena Morotti participated in and delivered the talk entitled "A Learned Inverse Problem formulation for medical image enhancement under Contrast Agent Reduction" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Elena Morotti** participated in and delivered the talk entitled "Accelerating non-convex optimization with deep networks for sparse CT reconstruction" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Eliott Kacedan participated in and delivered the talk entitled "Analysis of the anisotropic elastic tensor recovery problem from intenal data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Elisa Francini participated in and delivered the talk entitled "Unique continuation and stability estimates for inverse boundary value problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Elisa Francini participated in and delivered the talk entitled "A nonlinear problem with applications cardiac inverse in **electrophysiology**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Elli Karvonen** participated in and delivered the talk entitled "TILT: **Topological Interface Recovery in Limited-Angle Tomography**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Elliott Macneil participated in and delivered the talk entitled "A Hybrid Gaussian Beam Method for the Wave Equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Emilia Lavie Kyllikky Blaasten participated in and delivered the talk entitled "How did I end up here and how are inverse problems related?" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Emma Perrachione** participated in and delivered the talk entitled "Variably Scaled Kernels for the regularized solution of the parametric Fourier imaging problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Emma Perrachione** participated in and delivered the talk entitled "Feature Understanding and Sparsity Enhancement via 2-Layered kernel machines (2L-FUSE)" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

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We certify that Eva Sincich participated in and delivered the talk entitled "Size estimates for nanoplates" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Eviatar Bach participated in and delivered the talk entitled "Nesteroy Acceleration for Ensemble Kalman Inversion and Variants" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Eviatar Bach participated in and delivered the talk entitled "Learning Optimal Filters Using Variational Inference" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Fabian Schneider participated in and delivered the talk entitled "Optimal approximation error approach in Bayesian inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Fábio Junior Margotti participated in and delivered the talk entitled "Inexact Newton regularizations with uniformly convex stability terms: A unified convergence analysis" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Fernando Groff** participated in and delivered the talk entitled "On the Application of the ADO Method to the Coefficient Recovery Problem of the RTE" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Fernando Roldán participated in and delivered the talk entitled "Relaxed and Inertial Nonlinear Forward-Backward with Momentum" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Fernando Roldán participated in and delivered the talk entitled "Solution of Mismatched Monotone+Lipschitz Inclusion Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Fernando Silva De Moura participated in and delivered the talk entitled "A real-time method for ventilation and bloo pulsatility separation in functional images of the chest" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Fioralba Cakoni participated in and delivered the talk entitled "The Journal of Inverse Problems and the Birth of Non-iterative Inversion" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Florian Bossmann participated in and delivered the talk entitled "Improved impedance inversion by iterated graph Laplacian" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Francois Monard participated in and delivered the talk entitled "Xray transforms and transport twistor spaces" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Frank Werner participated in and delivered the talk entitled "Optimal rates of convergence for variational regularization of Poisson **Inverse Problems**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Gaoming Chen participated in and delivered the talk entitled "Determination of a small elliptical conductivity anomaly from minimal and optimal boundary measurements" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Gesa Sarnighausen** participated in and delivered the talk entitled "Geometry of Lebesgue-Bochner spaces with an application in dynamic inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Gesa Sarnighausen** participated in and delivered the talk entitled "Lebesgue-Bochner spaces in dynamic inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Giovanni Alberti participated in and delivered the talk entitled "Learning (simple) regularizers for inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Giovanni Alberti participated in and delivered the talk entitled "The learned range test method for the inverse inclusion problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Organizing Committee

























We certify that Giovanni Covi participated in and delivered the talk entitled "Quantum algorithms for Inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Giuseppe Scarlato participated in and delivered the talk entitled "A Preconditioned Version of a Nested Primal-Dual Algorithm for Image **Deblurring**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Hadrian Quan participated in and delivered the talk entitled "Stability of inverse problems arising from wave equations of Magnetic Schrödinger operators" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Haim Grebnev** participated in and delivered the talk entitled "The Non-Abelian X-Ray Transform on Asymptotically Hyperbolic Spaces" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Hamidreza Anbarlooei participated in and delivered the talk entitled "Inverse Problem of Parameter Calibration from Diverse Observations for Complex Hydrocarbon Mixtures" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Hanming Zhou participated in and delivered the talk entitled "Inverse problems for time-dependent nonlinear transport equations" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Helcio Orlande participated in and delivered the talk entitled "Inverse Analysis to Detect Skin Cancer Tissue from Transient Reflectance Signal of a Short-Pulse Laser Beam" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Hiroyuki Chihara participated in and delivered the talk entitled "Double fibration transforms with conjugate points" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Hjørdis Amanda Schlüter participated in and delivered the talk entitled "An inverse problem in anisotropic elasticity" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Hjørdis Amanda Schlüter** participated in and delivered the talk entitled "The second step in hybrid inverse problems in limited view" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Hok Shing Wong participated in and delivered the talk entitled "A bilevel framework for variational image reconstruction with learned convex regularisers" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that **Howard Levinson** participated in and delivered the talk entitled "Numerical Methods for a Fractional Helmholtz Problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Hugo Carrillo Lincopi** participated in and delivered the talk entitled "PINNs-based blood flow data assimilation from PC-MRI data with artifacts" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Ilaria Trombini participated in and delivered the talk entitled "Stochastic algorithms for the Computed Tomography (CT) problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Indrani Zamindar participated in and delivered the talk entitled "Tensor tomography using V-line transforms with vertices restricted to a circle" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Indrani Zamindar participated in and delivered the talk entitled "2D V-line Tensor Tomograph" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Isaac Harris participated in and delivered the talk entitled "Extending Qualitative Methods to Biharmonic Scattering" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Isaac Harris participated in and delivered the talk entitled "Asymptotic Analysis Applied to Small Volume Inverse Shape Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Isabela Vasconcellos Viana participated in and delivered the talk entitled "Fast accelerated solver for the inverse obstacle scattering using multifrequency data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that James Webber participated in and delivered the talk entitled "Microlocal analysis of non-linear operators arising in Compton CT" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Jiayang Shi participated in and delivered the talk entitled "Rethinking Self-Supervised Learning in Inverse Problems for Imaging" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Joel Conceição Rabelo participated in and delivered the talk entitled "On an inertial Levenberg-Marquardt method" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Johannes Wagner participated in and delivered the talk entitled "Global Concave Optimization for the Calderón Problem with Finitely Many Unknowns" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that John Schotland participated in and delivered the talk entitled "Radiative Transport of Entangled Photons" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that John Schotland participated in and delivered the talk entitled "Acoustically Modulated Electromagnetic Inverse Source Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Jorge Zubelli participated in and delivered the talk entitled "A Statistical Learning Approach to Local Volatility Calibration and Option Pricing" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that José Alberto Iglesias Martínez participated in and delivered the talk entitled "A one-cut conditional gradient method for total variation regularization" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Juan Pablo Agnelli participated in and delivered the talk entitled "Combining electrical impedance tomography and machine learning for stroke classification" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Juan Pablo Agnelli participated in and delivered the talk entitled "Diffuse optical tomography with an imperfectly known boundary" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Kateryna Morozovska participated in and delivered the talk entitled "Discovering Partially Known Ordinary Differential Equations: A Case Study On The Cellulose Degradation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Kathrin Hiltrud Hellmuth participated in and delivered the talk entitled "On Qualitative Experimental Design" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Katya Krupchyk participated in and delivered the talk entitled "Anisotropic fractional Calderón problem with external data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Katya Krupchyk participated in and delivered the talk entitled "Calderón problem for fractional Schrödinger operators on closed Riemannian manifolds" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Kirill V. Golubnichiy participated in and delivered the talk entitled "III-Posed Problem for the Black-Scholes Equation Solution and Machine Learning" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Kui Ren** participated in and delivered the talk entitled "**Reduced** Order Models for Inverse Transport Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Laura Antonelli participated in and delivered the talk entitled "Graph-Based Image Segmentation through Regularized Min-Cut Formulations" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Laura Bazahica participated in and delivered the talk entitled "Uncertainty quantification for electrical impedance tomography using quasi-Monte Carlo methods" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Laurent Seppecher participated in and delivered the talk entitled "Recent advances on inverse elasticity problems applied to material and medical imaging" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Lauri Oksanen participated in and delivered the talk entitled "On the interplay between the light ray and the magnetic X-ray transforms" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Lauri Oksanen participated in and delivered the talk entitled "Minkowski metric is rigid in the Lorentzian Calderon problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Lena Dunst participated in and delivered the talk entitled "Large-Scale Model-Based 3D Image Reconstruction for Raster-Scan Optoacoustic Mesoscopy" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Leonard Busch** participated in and delivered the talk entitled "Analytic Fourier Integral Operators and Inverse Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Leonardo Galli participated in and delivered the talk entitled "Nonmonotone stochastic line searches without overhead for training neural networks" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that **Leonid Kunyansky** participated in and delivered the talk entitled "Range description for the free space wave operator" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Luca Calatroni participated in and delivered the talk entitled "Image reconstruction with (learned) regularisation parameter maps" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Luca Calatroni participated in and delivered the talk entitled "Bregman-relaxations of ` 0 -regularised criteria with general data terms" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Luca Ratti participated in and delivered the talk entitled "Convex regularization for static and dynamic inverse problems with randomly subsampled measurements" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Luca Ratti participated in and delivered the talk entitled "Sample error estimates for sparsity-promoting learned regularizers" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Luca Rondi participated in and delivered the talk entitled "Handling regularization and discretization in the reconstruction for elliptic inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Luis Briceño-Arias participated in and delivered the talk entitled "Lyapunov analysis for FISTA under strong convexity" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Luis Fernando Nazari participated in and delivered the talk entitled "Physics-Informed Neural Network for Water Flow Prediction and Flood Control in a Watershed" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Maicon Marques Alves** participated in and delivered the talk entitled "A strongly convergent inertial proximal algorithm with applications to variational inequalities" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Malena Espanol participated in and delivered the talk entitled "Variable Projection Methods for Large-scale Inverse Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Malena Espanol participated in and delivered the talk entitled "Edge-preserving Randomized Iterative Methods for X-ray Computed Tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Manabu Machida participated in and delivered the talk entitled "Nonlinear Rytov approximation with the inverse Rytov series" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Mandeep Kumar participated in and delivered the talk entitled "Stability of time-independent coefficients of relativistic Schrödinger equation in infinite waveguide" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Margaret Duff participated in and delivered the talk entitled "Stochastic Optimisation in Imaging Inverse Problems with Examples in CT, PET and Motion Compensated MR" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Maria Angeles Garcia-Ferrero participated in and delivered the talk entitled "Concentration inequalities and signal recovery" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

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We certify that Maria Angeles Garcia-Ferrero participated in and delivered the talk entitled "Reconstruction for the Calderón problem with Lipschitz conductivities" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Markus Juvonen participated in and delivered the talk entitled "Dual-grid parameter choice method with application to deblurring" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Martin Halla participated in and delivered the talk entitled "On the instabilities of naive FEM discretizations for PDEs with sign-changing coefficients" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Martin Huska participated in and delivered the talk entitled "Predictor-Corrector Strategy for Nonconvex Problems Application to 1D Signal Decomposition" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Martin Zach participated in and delivered the talk entitled "A Bayesian Revolution in the Age of Deep Learning" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Masahiro Yamamoto** participated in and delivered the talk entitled "With the Journal Inverse Problems: a personal viewpoint" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Matias Courdurier participated in and delivered the talk entitled "Inverse problem for a transport equation pencil beam approximation on slightly variable speed media" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Matias Courdurier participated in and delivered the talk entitled "Analysis of Neural Activation in Time-dependent Membrane Capacitance Models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that **Matteo Santacesaria** participated in and delivered the talk entitled "Learning the optimal regularizer for inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Matteo Santacesaria** participated in and delivered the talk entitled "Self-Supervised Deep Equilibrium Learning for Sparse-Angle CT **Reconstruction**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Matti Lassas participated in and delivered the talk entitled "Inverse scattering problems for non-linear wave equations" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Matti Lassas participated in and delivered the talk entitled "Manifold learning and inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Medet Nursultanov** participated in and delivered the talk entitled "The backscattering problem for time-dependent potentials" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Melody Alsaker** participated in and delivered the talk entitled "Toward Virtual X-ray CT Reconstructions from Human Data **Measurements**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Mengni Li participated in and delivered the talk entitled "Recent progress on the inverse scattering theory for ideal Alfvén waves" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Meri Laurikainen participated in and delivered the talk entitled "Recovering the metric from relative distance comparison data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Michael Hintermueller participated in and delivered the talk entitled "Quantitative magnetic resonance imaging: data-driven, physics integrated models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Michael Michael V. Klibanov participated in and delivered the talk entitled "Convexification Method in Inverse Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Michel Cristofol participated in and delivered the talk entitled "Versatility of Carleman estimates: application to inverse problems for **Maxwells system**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Nathan Soedjak participated in and delivered the talk entitled "Imaging Second Harmonic Generation in Quantitative **Thermoacoustics**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Nicolas Alejandro Barnafi Wittwer participated in and delivered the talk entitled "The inverse (poro)elasticity problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Nicholas Boffi participated in and delivered the talk entitled "Stochastic interpolants: from generative modeling to generative science and engineering" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Nikolaos Eptaminitakis participated in and delivered the talk entitled "Tensor Tomography on the Hyperbolic Disk" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Oliver Dunbar participated in and delivered the talk entitled "Tuning randomized learning algorithms: A case study for random feature regression" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that Otmar Scherze participated in and delivered the talk entitled "Regularization of Nonlinear Inverse Problems - From Functional Analysis to Data-Driven Approaches" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Paolo Angella participated in and delivered the talk entitled "Diffusing Motion Artifacts for unsupervised correction in brain MRI images" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Parveen Kumar participated in and delivered the talk entitled "Determining the time dependent convection term and matrix valued potential in a heat equation from partial data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Patricio Guerrero Prado participated in and delivered the talk entitled "A Primal-Dual algorithm with Krylov subspace projection for Xray computed tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Plamen Stefanov participated in and delivered the talk entitled "Lorentzian scattering rigidity, recent results" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Rafaela Filippozzi participated in and delivered the talk entitled "On the regularization property of Levenberg-Marquardt with Singular Scaling for inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Rahul Rahul** participated in and delivered the talk entitled "**Tensor** tomography for a set of generalized V-line transforms in

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2" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of tl on - FGV EMAp, Rio de Janeiro, Brazil, from July 28 t

Yuri Saporito

Organizing Committee























We certify that **Rakesh Rakesh** participated in and delivered the talk entitled "The fixed angle inverse scattering problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Richard Kowar** participated in and delivered the talk entitled "Fullfield Photoacoustic Tomography with Variable Sound Speed and Attenuation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Robert Plato** participated in and delivered the talk entitled "Sparse variational regularization with oversmoothing in the scale of sequence spaces" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Ru-Yu Lai participated in and delivered the talk entitled "Partial data inverse problems for the nonlinear magnetic Schrödinger equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Salla-Maaria Latva-Äijö participated in and delivered the talk entitled "The training of SVMs through a smooth sparse-promotingregularized squared hinge loss minimization" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Salvatore Cuomo participated in and delivered the talk entitled "Enhancing MRI Head and Neck Imaging with GAN-Based Noise and Artifact Reduction" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Samuli Siltanen participated in and delivered the talk entitled "Electrical impedance tomography and virtual X-rays" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Sara Sippola participated in and delivered the talk entitled "Learned enclosure method for experimental EIT data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

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We certify that Saulo Pomponet Oliveira participated in and delivered the talk entitled "Inversion of magnetic anomalies from dikes incorporating data error estimates" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Sean Gomes participated in and delivered the talk entitled "Lorentzian Calderón problem on vector bundles near Minkowski geometry" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Sebastian Acosta** participated in and delivered the talk entitled "Determination of ultrasonic properties using complex periodic solutions to the Westervelt equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Z. Saporito

Yuri Saporito Organizing Committee























We certify that **Sebastian Acosta** participated in and delivered the talk entitled "An efficient pseudodifferential preconditioner for the Helmholtz equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Sebastián Alejandro Muñoz Thon** participated in and delivered the talk entitled "A Calderóns problem for harmonic maps" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Sebastián Alejandro Muñoz Thon** participated in and delivered the talk entitled "Guillarmou's Pi operator for general flows and applications to the magnetic ray transform" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Sebastian Paul Hermann Banert** participated in and delivered the talk entitled "Algorithms with learned deviations" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Serena Morigi** participated in and delivered the talk entitled "**Deep** Unrolling Graph-Network for Nonlinear Multi-Frequency Electrical Impedence Tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Shari Moskow** participated in and delivered the talk entitled "On optimality and bounds for internal solutions generated from impedance data driven Gramians" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Shari Moskow** participated in and delivered the talk entitled "The inverse Born series for the reconstruction of Kerr nonlinearities" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Shubham Ramkisan Jathar** participated in and delivered the talk entitled "The matrix weighted real-analytic double fibration transforms" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Siiri Rautio participated in and delivered the talk entitled "Realdata EIT reconstruction using virtual X-rays and deep learning" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Silvia Berra participated in and delivered the talk entitled "Calibrating parameters in mass-action chemical reaction networks through inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Simon Arridge participated in and delivered the talk entitled "A **Fully Stochastic Reconstruction Method for Quantitative Photoacoustic** Tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Simon Arridge participated in and delivered the talk entitled "Inverse Problems in the Age of Al" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Simone Sanna participated in and delivered the talk entitled "A convex lifting approach for the Calderón problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Soumen Senapati participated in and delivered the talk entitled "Simultaneous Reconstruction of the Density, Bulk and Source in the Time-Domain Wave Equation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Spyridon Filippas** participated in and delivered the talk entitled "On the stability of a hyperbolic inverse problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Stanley Osher participated in and delivered the talk entitled "A Novel Approach for Solving Hamilton-Jacobi Equations with Applications to Optimal Transport" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Stephen David Mis** participated in and delivered the talk entitled "Interpretable and interactive learned regularizes" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

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Brazil



CERTIFICATE

We certify that **Suman Kumar Sahoo** participated in and delivered the talk entitled "An inverse problem for a nonlinear biharmonic operator" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Suman Kumar Sahoo** participated in and delivered the talk entitled "Momentum ray transform and its applications to polyharmonic inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Tahsin Khajah participated in and delivered the talk entitled "Transmission imaging using sweeping Pade approximation of pseudodifferential operators" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Tan Thanh Bui participated in and delivered the talk entitled "TAEN: A Model-Constrained Tikhonov Autoencoder Network for Forward and Inverse Problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Teemu Saksala participated in and delivered the talk entitled "Lipschitz Stability of Travel Time Data" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Teemu Saksala participated in and delivered the talk entitled "Recovery of Time-Dependent Coefficients in Hyperbolic Equations on Manifolds" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Teemu-Taneli Tapio Sahlström** participated in and delivered the talk entitled "Estimation of electrical conductivity and permittivity in quantitative thermoacoustic tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Thi Lan Nhi Vu participated in and delivered the talk entitled "Neural network parametrized level sets for segmentation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Tram Nguyen Thi Ngoc participated in and delivered the talk entitled "Viscous-inertial waves on the surface of the Sun: modeling, forward and inverse problems" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Tram Nguyen Thi Ngoc participated in and delivered the talk entitled "The extended adjoint state and nonlinearity in correlation-based passive imaging" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Thorsten Hohage** participated in and delivered the talk entitled "A unified variational analysis of non-standard noise models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Tobias Wolf** participated in and delivered the talk entitled "Image deblurring under multiplicative noise" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that **Tommi Joni Henrik Heikkilä** participated in and delivered the talk entitled "Robust accelerated PGET reconstruction for safe disposal of **spent nuclear fuel**" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that **Tommi Joni Henrik Heikkilä** participated in and delivered the talk entitled "Multiresolution low-rank regularization in dynamic tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Tristan Goodwill participated in and delivered the talk entitled "A fast direct solver for PDEs on surfaces" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

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We certify that **Tuomo Valkonen** participated in and delivered the talk entitled "Differential estimates for fast first-order multilevel nonconvex optimisation" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

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We certify that **Vanda Maria Luchesi** participated in and delivered the talk entitled "Reconstruction of Transient Anisotropic Diffusion Tensor in Diffusion Models" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Victor Kovtunenko participated in and delivered the talk entitled "Lagrangian approach and shape gradient for inverse problem of breaking line identification in solid" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Vinicius Albani participated in and delivered the talk entitled "Fitting Simultaneously the SPX and VIX Smiles" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that William Rundell participated in and delivered the talk entitled "Undetermined coefficient problems for reaction diffusion equations" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that Yiran Wang participated in and delivered the talk entitled "Reconstruction of the observable Universe from the Sachs-Wolfe effects" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Yiran Wang participated in and delivered the talk entitled "A uniqueness theorem for the Calderon problem with small anisotropies" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Yousry Azmy participated in and delivered the talk entitled "DIMP Approach to Computing the Radiation Source Distribution from the Responses of a Few Detectors" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Yuri Saporito participated in and delivered the talk entitled "Nonparametric Instrumental Variable Regression through Stochastic Approximate Gradients" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporita

Yuri Saporito Organizing Committee























We certify that **Zeljko Kereta** participated in and delivered the talk entitled "On Randomised Reconstruction Strategies in Optical Tomography" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri Saporito Organizing Committee























We certify that Zeljko Kereta participated in and delivered the talk entitled "Stochastic gradient methods in Banach Spaces" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee























We certify that Ziyao Zhao participated in and delivered the talk entitled "An inverse Signorini obstacle problem" at the 12th Applied Inverse Problems Conference (AIP 2025), held at the School of Applied Mathematics of the Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 01, 2025.

Yuri F. Saporito

Yuri Saporito Organizing Committee

















