



We certify that **Abba Gumel** (University of Maryland) participated and gave the talk entitled "Mathematics of Malaria dynamics and control" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Americo Cunha** (UERJ) participated and gave the talk entitled "Uncertainty Quantification in Mechanistic Epidemic Models" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **André Carlos Ponce de Leon Ferreira de Carvalho** (USP) participated and gave the talk entitled "Al Remaking Space: Epidemiological Initiatives" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Eduardo Massad** (EMAp-FGV) participated and gave the talk entitled "Time-Dependent Vaccine Efficacy Estimation Quantified by a Mathematical Model" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

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Claudio Struchiner





We certify that **Felipe Antunes** (PROCC-Fiocruz) participated and gave the talk entitled "Exploring the Linkages between Rural Economies, Environmental Degradation, and Neglected Tropical Diseases in the Amazon Biome" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Flavio Coelho** (EMAp-FGV) participated and gave the talk entitled "Epi-scanner: a Large Scale Online Framework for Epidemiological analysis" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

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Claudio Struchiner





We certify that **Guilheme Werneck** (UERJ, UFRJ, Ministério da Saúde) participated and gave the talk entitled "The new secretariat for health and environmental surveillance of the Brazilian Ministry of Health: prospects and porssibilities for collaboratio" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Guilherme Tegoni Goedert** (EMAp-FGV) participated and gave the talk entitled "COMORBUSS & OLIM: A Bio-Social model for the design of Public Health Policies" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

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Claudio Struchiner





We certify that **John Edmunds** (London School of Hygiene and Tropical Medicine) participated and gave the talk entitled "The use of modelling to inform COVID-19 policy in the UK" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

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Claudio Struchiner





We certify that **John T. McCrone** (Fred Hutchinson Cancer Center) participated and gave the talk entitled "What lies beneath? Determining the drivers of epidemic waves from large genomic datasets" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Leonardo Soares Bastos** (PROCC-Fiocruz) participated and gave the talk entitled "Infecious disease probabilistic predictions: Forecasting and beyond" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Lucas Stolerman** (Oklahoma State University) participated and gave the talk entitled "Network models and data-driven detection of epidemic outbreaks" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Luiz Max Carvalho** (EMAp-FGV) participated and gave the talk entitled "Al buio non si trova: Principled phylodynamics for pandemic preparation" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Mauricio Santillana** (Harvard T.H. Chan School of Public Health, Northeastern University) participated and gave the talk entitled "Monitoring disease outbreaks using multiple mathematical approaches and novel data sources. Lessons learned during the COVID-19 pandemic." at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho FGV EMAp Director Claudio Struchiner Chair





We certify that **Max Souza** (UFF) participated and gave the talk entitled "Identifiability and observability of the SIR model with quarantine" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Oswaldo G. Cruz** (PROCC-Fiocruz) participated and gave the talk entitled "Epidemiological Intelligence Center - Rio de Janeiro" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Rudi Rocha** (FGV EAESP) participated and gave the talk entitled "Exposure to Infectious Diseases During Pregnancy, Birth Dutcomes and Policy Response" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

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César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Tiago Pereira** (ICMC-USP) participated and gave the talk entitled "Optimized delay of the second COVID-19 vaccine dose reduces ICU admissions" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Troy Day** (Queen's University) participated and gave the talk entitled "Modeling the Evolutionary Dynamics of Novel Infectious Diseases" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Vinicius Albani** (UFSC) participated and gave the talk entitled "Stochastic Transmission in Epidemiological Models" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner





We certify that **Weeberb João Réquia Júnior** (EPPG-FGV) participated and gave the talk entitled "Ensemble learning approach for predictive modeling of exposure variables at high spatiotemporal resolution" at the International Colloquium on Mathematical Modeling in Epidemiology held at the School of Applied Mathematics of Getulio Vargas Foundation, from August 14th - 17th, 2023.

Rio de Janeiro, August 17th, 2023.

César Camacho

FGV EMAp Director

Claudio Struchiner Chair