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CERTIFICATE

We certify that **Aaron Defazio** participated in and delivered the Plenary talk entitled

"Schedules and Schedule-Free Learning" at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025** held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from May 05 to May 07, 2025.

Philip Thompson

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Local Organizer

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We certify that **Alfredo Iusem** participated in and delivered the Plenary talk entitled **"Univariate representations of solutions to generic polynomial complementarity problems"** at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025** held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from May 05 to May 07, 2025.

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We certify that **Benar Svaiter** participated in and delivered the Plenary talk

entitled **"Weber-Fechner Law and the Optimality of the Logarithmic Scale"**

at the **1st Carioca Workshop in Optimization and Applications - CariOPT**

2025 held at School of Applied Mathematics of Getulio Vargas Foundation –

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We certify that **Cristóbal Guzmán** participated in and delivered the talk entitled

"Differentially-Private Synthetic Data Generation: A Saddle-Point Approach"

at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025**

held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp,

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We certify that **Douglas Gonçalves** participated in and delivered the talk entitled **"A Levenberg--Marquardt algorithm for completely positive matrix factorization"** at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025** held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from May 05 to May 07, 2025.

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We certify that **Ernesto Birgin** participated in and delivered the Plenary talk entitled

"Regularized block coordinate descent methods: Complexity and applications"

at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025**

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We certify that **Felipe Bueno** participated in and delivered the talk entitled **"On the optimization methods with inaccurate evaluations of the functions involved"** at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025** held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from May 05 to May 07, 2025.

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We certify that **Felipe Lara** participated in and delivered the talk entitled

"Optimal Trade Characterizations in Multi-Asset Crypto Financial Markets"

at the **1st Carioca Workshop in Optimization and Applications - CariOPT**

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We certify that **Gabriel Belém** participated in and delivered the talk entitled

"Optimization of problems involving group sparsity" at the **1st Carioca**

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We certify that **Jefferson G. Melo** participated in and delivered the talk entitled

"An Inexact Proximal Gradient Method with an Explicit Linesearch" at the

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at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp,

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We certify that **João Carlos de Oliveira Souza** participated in and delivered the

talk entitled **"The difference of convex algorithms on Riemannian manifolds"**

at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025**

held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp,

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We certify that **Luiz-Rafael Santos** participated in and delivered the talk entitled

"Randomizing Block-wise Circumcenter-Based Methods for Solving Linear

Systems" at the **1st Carioca Workshop in Optimization and Applications - CariOPT**

2025 held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp,

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We certify that **Majela Pentón Machado** participated in and delivered the talk

entitled **"An inertial method for solving monotone inclusion problems"** at

the **1st Carioca Workshop in Optimization and Applications - CariOPT**

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We certify that **Manoel Jardim** participated in and delivered the Semi-Plenary talk entitled **"A Dantzig-Wolfe Decomposition Method for Quasi-Variational Inequalities"** at the **1st Carioca Workshop in Optimization and Applications - CariOPT 2025** held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from May 05 to May 07, 2025.

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We certify that **Max Gonçalves** participated in and delivered the talk

entitled **"On FISTA with a relative condition"** at the **1st Carioca**

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We certify that **Orizon Ferreira** participated in and delivered the Plenary talk entitled **"The Busemann Subdifferential and Difference of Convex Algorithms on Hadamard Manifolds"** at the **1ˢᵗ Carioca Workshop in Optimization and Applications - CariOPT 2025** held at School of Applied Mathematics of Getulio Vargas Foundation – FGV EMAp, Rio de Janeiro, from May 05 to May 07, 2025.

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We certify that **Paulo J.S. Silva** participated in and delivered the talk entitled **"Parallel Newton methods for the continuous quadratic knapsack problem: A Jacobi and Gauss-Seidel tale"** at the 1st **Carioca Workshop in Optimization and Applications - CariOPT 2025** held at School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from May 05 to May 07, 2025.

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We certify that **Roger Behling** participated in and delivered the talk entitled

"On Levenberg-Marquardt methods and error bound conditions" at the **1st**

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We certify that **Wilfredo Sosa** participated in and delivered the talk entitled

"From Euclidean segment to premonotonicity" at the **1st Carioca**

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