

CERTIFICATE

We certify that **Americo Barbosa da Cunha Junior** delivered the talk entitled “**The Cross-Entropy Method for Differential Equation-Based Optimization Problems**” at the **Workshop on Stochastic Modeling and Uncertainty Quantification - SM&UQ 2025**, held at the School of Applied Mathematics, Getulio Vargas Foundation - FGV EMap, Rio de Janeiro, Brazil, from September 18 to 19, 2025.



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