

## CERTIFICATE

We certify that **Bernardo Costa** participated in and delivered the minicourse entitled “**Risk budgeting portfolios**” at the **19th Research in Options** held at the School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from December 4th, 2024 to December 8th, 2024.

*Rodrigo dos Santos Targino*

Rodrigo Targino  
Organizing Committee

SUPPORTED BY:

**Bloomberg**



ORGANIZED AND HOSTED BY:



## CERTIFICATE

We certify that **Eduardo Abi Jaber** participated in and delivered the minicourse entitled “**Volterra Processes in Quantitative Finance**” at the **19th Research in Options** held at the School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from December 4th, 2024 to December 8th, 2024.

*Rodrigo dos Santos Targino*

Rodrigo Targino  
Organizing Committee

SUPPORTED BY:

**Bloomberg**



ORGANIZED AND HOSTED BY:



## CERTIFICATE

We certify that **Ryan Donnell** participated in and delivered the minicourse entitled “Models of optimal execution” at the **19th Research in Options** held at the School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAp, Rio de Janeiro, from December 4th, 2024 to December 8th, 2024.

*Rodrigo dos Santos Targino*

Rodrigo Targino  
Organizing Committee

SUPPORTED BY:

**Bloomberg**



ORGANIZED AND HOSTED BY:



## CERTIFICATE

We certify that **Teemu Pennanen** participated in and delivered the minicourse entitled “**An introduction to the mathematics of incomplete financial markets**” at the **19th Research in Options** held at the School of Applied Mathematics of Getulio Vargas Foundation - FGV EMAP, Rio de Janeiro, from December 4th, 2024 to December 8th, 2024.

*Rodrigo dos Santos Targino*

Rodrigo Targino  
Organizing Committee

SUPPORTED BY:

**Bloomberg**



ORGANIZED AND HOSTED BY:

