

ARPM Mini-workshop

Advanced Risk and Portfolio Management®

Advanced statistical techniques across disparate asset classes

With the visual support of simulation videos, generated from real data, we provide an overview of advanced statistical techniques to model and estimate the dynamics of financial markets.

About the Program. We introduce the concept of "risk driver" and "invariant", illustrating:

- the asset-specific art of building risk drivers across the financial markets
- the asset-agnostic science of applying statistics (econometrics and machine learning) to extract the invariants and estimate their joint distribution.

Then, we translate the above statistical analysis into the asset-specific joint distribution of instrument returns.

Session I (9:30 am - 11:00 am)

Introduction

The "Checklist": 10 steps for Advanced Risk and Portfolio Management

Step 1. From asset-specific data to homogeneous risk drivers

Step 2. Econometric analysis of the risk drivers and invariants extraction

Session II (11:30 am – 1:00 pm)

Step 3. Estimation of the joint distribution of the invariants

Step 4. Distribution of the risk drivers at a future investment horizon

Step 5. Distribution of the instrument returns at the investment horizon

About the instructor



Angela Loregian is a senior researcher at ARPM, where she has contributed since inception to the creation of the ARPM Lab.

Angela runs seminars and webinars for ARPM worldwide, including within the ARPM Bootcamp, ARPM's flagship event. Angela earned a Ph.D. in Mathematics for financial market analysis, an M.S. in Economics and Finance, and a B.S. in Economics from the University of Milano-Bicocca.

About ARPM. ARPM was founded in 2010 by Attilio Meucci. ARPM's mission is to set and disseminate the standards for advanced quantitative risk management and portfolio management, across the financial industry: asset management, insurance, and banking.

To achieve its mission, ARPM:

- maintains the [ARPM Lab®](#), an interactive learning platform
- offers a suite of courses: the [ARPM Bootcamp®](#), a one-week intensive training; the [ARPM Marathon®](#), a 5-month assisted course; the [ARPM MOOC®](#), an online, self-study course; and on-demand courses
- administers the [ARPM Certificate®](#) for employers to hire and grow their talent base