

# International Fintech Research Conference, Perugia January 30-31

## Scientific Program

**January 30 (Day 1) - Room 2 (1 Floor)**

**9.00-9.30**

**Opening Session and Institutional Greetings**

**9.30-10.30**

**Cryptocurrencies Session**

*Chair: Tomaso Aste*

Information flow in the FTX bankruptcy: A network approach

Riccardo De Blasis, Luca Galati, Rosanna Grassi, **Giorgio Rizzini**

A Sea of Coins: The Proliferation of Cryptocurrencies in UniswapV2

Manuel Naviglio, **Francesco Tarantelli**, Fabrizio Lillo

Integration or Continuous Separation? Examining the Dynamic Relationship Between the  
Crypto Sphere and Conventional Finance

**Tomaso Aste**, David Vidal-Tomás

**10.30-11.00**

**Coffee break**

**11.00-13.00**

**Best Paper Award - Session I**

*Chair: Silvia Muzzioli*

Spectral signatures of structural change in financial networks

**Valentina Macchiati**, Emiliano Marchese, Piero Mazzarisi, Diego Garlaschelli, Tiziano Squartini

Explainable Artificial Intelligence methods for financial time series

Paolo Giudici, **Alessandro Piergallini**

Genetic Asset Management (GAM)

**Michael Trequattrini**, Giovanni Trombetta

A Network Inference Framework Using Optimal Transport for Distributional Data

**Alessandro Spelta**

Resilience of Market Returns around ESG Controversies: Insights from the S&P 100

Tomaso Aste, Emilio Barucci, Maxime L.D. Nicolas, **Davide Stocco**

A neural network-particle swarm solver for sustainable portfolio optimization problems

**Imma Lory Aprea**, Gabriele Sbaiz

**13.00-14.00**

**Lunch**

**14.00-15.00**

**Plenary Session I - Thierry Foucault**

*Chair: Stefania Corsaro*

**January 30 (Day 1) - Room 2 (1 Floor)**

**15.00-17.00**

**Best Paper Award - Session II**

*Chair: Paolo Giudici*

A statistical package for safe artificial intelligence

**Golnoosh Babaei**, Paolo Giudici

Managing Overconfidence in Probabilistic Time Series Forecasting with Application to Electricity Consumption

Roberto Baviera, **Pietro Manzoni**

Spillovers in the cryptocurrency market and the role of attention, sentiment and uncertainty

**Katarzyna Bernier**, Silvia Muzzioli

Optimal Execution under Incomplete Information

**Yadh Hafsi**, Edoardo Vittori

Deep Learning Models for High Frequency Trading

**Jacopo Chiapparino**, Pier Giuseppe Giribone

Decentralized and Centralized Options Trading: A Risk Premia Perspective

**Andera Andolfatto**, Siddharth Naik, Lorenzo Schönleber

**17.00-17.30**

**Coffee break**

**17.30-18.30**

**Portfolio Selection Session - Short Talks**

*Chair: Giovanni Bonaccorsi*

Explainable and Sustainable Portfolio Strategies

Paolo Giudici, Maria Cristina Recchioni, **Gloria Polinesi**

Portfolio allocation with risk budgeting restrictions using stock selection based on TODIM

**Massimiliano Kaucic**, Renato Pelessoni, **Filippo Piccotto**

A mixture transition distribution approach to portfolio optimization

**Riccardo De Blasis**, Luca Galati, Filippo Petroni

Climate physical Risk: A Firm Value Model Approach

**Michele Azzone**

Improved electricity prices forecasts with LSTM networks leveraging connectedness among commodities

**Giovanni Bonaccorsi**, Andrea Flori

**18.30-19.00**

**Best Paper Prize**

**20.00**

**Social Dinner**

**Ristorante del Sole - Via della Rupe 1, Perugia**

**January 31 (Day 2) - Room 2 (1 Floor)**

**9.00-10.20**

**Cryptocurrencies & Defi Session**

*Chair: Federico Gatta*

Centralised exchanges & proof-of-solvency: The guardians of trust

**David Vidal-Tomás**

Herding behaviour in cryptocurrencies market

**Farhana Raheem**, Silvia Muzzioli

The Market for Block Space Quantifying Optimal Blockchain Fee Structures

Sean Foley, **Luca Galati**, Jiri Svec

Statistical properties and stylized facts of Decentralized Exchanges

**Federico Gatta**, Daniele Maria Di Nosse, Fabrizio Lillo, Sebastian Jaimungal

**10.20-10.50**

**Coffee break**

**10.50-11.50**

**Plenary Session II - Alvaro Cartea**

*Chair: Emilio Barucci*

**11.50-13.10**

**ML & AI Session**

*Chair: José Daniel Pascual Triana*

Text-Based Measures of Cyber Risk The Economic Impact of Cyber Risk News

**Umberto Cherubini**, Giovanni Della Lunga, Gianna Figà Talamanca, Barbara Guardabascio

Optimal Execution via Reinforcement Learning in Agent Based Simulations

Yadh Hafsi, **Edoardo Vittori**

Predictive Performances and Explainability of Linear and Nonlinear Models of Price and Trades

**Manuel Naviglio**, Fabrizio Lillo

Data morphology and machine learning

**José Daniel Pascual Triana**, Paola Cerchiello, Paolo Giudici

**13.10-13.30**

**SoBigData Project - Fabrizio Lillo**

*Chair: Gianna Figà-Talamanca*

**13.30-14.30**

**Lunch**

**January 31 (Day 2) - Room 2 (1 Floor)**

**14.30-15.30**

**Finance Session**

*Chair: **Manuela Gallo***

A high-frequency approach to risk measures

Federico Gatta, Fabrizio Lillo, **Piero Mazzarisi**

Portfolio hedging through an equity index based on verified emissions: an application for EU ETS-regulated firms

**Andrea Flori**, Mattia Chiappari, Francesco Scotti

Financial literacy, robo-advisors, and the demand for human financial advice:

Evidence from Italy

David Aristei, **Manuela Gallo**

**15.30-16.00**

**Coffee break**

**16.00-17.15**

**Fintech & Numerical Methods Session**

*Chair: **Adelaide Emma Bernardelli***

Adapting Large Language Models for the Financial Domain:

HangiKredi's LLM-Powered Financial Assistant

Bekir Çetintav, Ghaith Dkmak, Fatih Baday, **Burak Egeli**

Can Bank Decisions Be Unfair? A Statistical Analysis of Fairness in Individual Credit Risk

Paolo Giudici, Parvati Neelakantan, **Simone Pavarana**, Thorsten Schmidt

Income and salary detection from Open Banking transaction and payment data:  
a comparative methodological perspective

Duc Tuyen TA, Ji Young Oh, **Wajdi Ben Saad**

Weighted maximum likelihood estimation of Hidden Markov models for financial time series

**Michael Trequattrini**, Francesco Bartolucci, Silvia Pandolfi

Forward-looking Conditional Monte Carlo for Path-dependent Options:

LSTM-based Market Case Studies

**Federico Tropiano**, Pier Giuseppe Giribone, Duccio Martelli

Measuring inequality in the adoption of ESG scores by small and medium enterprises

Alessandra Amendola, **Adelaide Emma Bernardelli**, Paolo Giudici