

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

Algorithmic pricing and liquidity in securities markets

*Chair: **Zelda Marino***

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

Etienne Chavalier, **Yadh Hafsi**, Vathana Ly Vath

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

17.30-18.40

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

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

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

Improved electricity prices forecasts with LSTM networks leveraging connectedness among commodities

Giovanni Bonaccorsi, Andrea Flori

18.40-19.00

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

Anonymity, Signaling, and Collusion in Limit Order Books

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**

15.30-16.30

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**

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

16.30-17.00

Coffee break