

$\Sigma\Phi$ Workshop on “Statistical Physics for the Digital Economy”

July 11 (Room TBC)

Session 1 – Chair: Tomaso Aste

- 15.00 – 15.30 Richard Olsen (Lykke)
Alpha Engine: designing an automated trading engine ([Abstract](#))
- 15.30 – 16.00 Paolo Tasca (University College London)
Technical, legal and business challenges faced by Blockchain enabled systems ([Abstract](#))
- 16.00 – 16.30 Fabio Caccioli (University College London)
Excess reciprocity distorts reputation in online social networks ([Abstract](#))
- 16.30 – 17.00 Giulio Cimini (IMT Lucca)
Algorithms for reputation and quality in scientific e-communities ([Abstract](#))
- 17.00 – 17.30 **Coffee break** - Presentation of the BARAC project

Session 2 – Chair: Giacomo Livan

- 17.30 – 18.00 Rosario Mantegna (Università di Palermo)
Price discovery and market liquidity at NASDAQ Nordic OMX exchanges ([Abstract](#))
- 18.00 – 18.30 Hideki Takayasu (Sony Computer Science Laboratories, Tokyo)
Transition between Poisson and Non-Poisson Fluctuations in Sales Numbers ([Abstract](#))
- 18.30 – 19.00 Tiziano Squartini (IMT Lucca)
Maximum-entropy models for networks ([Abstract](#))
- 19.00 – 19.30 Sebastian Poledna (Complexity Science Hub, Vienna)
An empirically calibrated large-scale agent-based model for an entire national economy ([Abstract](#))

July 12 (Room TBC)

Session 3 – Chair: Tiziana Di Matteo

- 15.00 – 15.30 Imre Kondor (Parmenides Foundation, Pullach)
Variance optimization with no short positions ([Abstract](#))
- 15.30 – 16.00 Luciano Pietronero (Università La Sapienza, Rome)
Firms' complexity: Technological scope, coherence and performance ([Abstract](#))
- 16.00 – 16.30 Misako Takayasu (Tokyo Institute of Technology)
Growth dynamics of complex business firms network ([Abstract](#))
- 16.30 – 17.00 Mateusz Wilinski (University of Warsaw)
Intraday correlation structure for high frequency financial data ([Abstract](#))
- 17.00 – 17.30 **Coffee break**

Session 4 – Chair: Guido Caldarelli

- 17.30 – 18.00** Henrik Jensen (Imperial College London)
Evolutionary dynamics of neighborhood economic status in cities ([Abstract](#))
- 18.00 – 18.30** Andrea Gabrielli (CNR Rome)
The scientific and technological competitiveness of nations: a network analysis ([Abstract](#))
- 18.30 – 19.00** Andrea Rapisarda (Università di Catania)
A multilayer approach for price dynamics in financial markets ([Abstract](#))
- 19.00 – 19.30** Giovanni Petri (ISI Foundation, Turin)
Topological data analysis for complex systems ([Abstract](#))