# Machine Learning in Economics

CENTRAL Workshop@HUB

17 – 18 May 2018

Kapelle, Wirtschaftswissenschaftliche Fakultät, HU Berlin
Spandauer Straße1, 10178 Berlin

## Thursday, 17.05.18

| Opening Session (Chair: Alla Petukhina) | |
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| 09:30 – 10:00 | **Arrival and Registration** |
| 10:00 – 10:15 | **Wolfgang Karl Härdle (Humboldt-Universität zu Berlin)**<br>**Welcome Speech** |
| 10:15 – 10:30 | **Piotr Jaworski (University of Warsaw)**<br>**On Evolution of the Yield Curve of CoCo Bonds** |
| 10:30 – 10:45 | **Magdalena Mojsiewicz (University of Sczcecin)**<br>**Modelling of Mortality among Oldold Groups** |
| 10:45 – 11:00 | **Alisa Kolesnikova (Humboldt-Universität zu Berlin)**<br>**Volatility Index for Cryptocurrencies - VCRIX** |
| 11:00 – 11:30 | Coffee Break |

| Morning Session (Chair: Alisa Kolesnikova) | |
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| 11:30 – 11:45 | **Ostap Okhrin (Dresden University of Technology)**<br>**Statistics is Everywhere** |
| 11:45 – 12:00 | **Andrea Barletta (Aarhus University)**<br>**It Only Takes a Few Moments to Hedge Options** |

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| 12:00 – 12:15 | **Jiao Can (University of Chinese Academy of Sciences)**<br>**Optimal design of product reliability, sales, and promotion under the nonrenewable warranty** |
| 12:15 – 12:30 | **Jenher Jeng (WALEX COSMOS)**<br>**Very Deep Learning on Domino Effect with the Capital Market Simulation Game WALEX** |
| 12:30 – 14:00 | Lunch |

| Afternoon Session I (Chair: Andrea Barletta) | |
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| 14:00 – 14:15 | **Junjie Hu (Humboldt-Universität zu Berlin)**<br>**Electricity Consumption Optimization Based on Time Series Forecasting** |
| 14:15 – 14:30 | **Robert Navrátil (Charles University Prague)**<br>**Maximum Volatility Portfolio** |
| 14:30 – 14:45 | **Mariusz Doszyń (University of Sczcecin)**<br>**Intermittent Demand Forecasting: Empirical Verification** |
| 14:45 – 15:00 | **Alla Petukhina (Humboldt-Universität zu Berlin)**<br>**Portfolio Allocation Strategies with Cryptocurrencies** |
| 15:00 – 15:30 | Coffee Break |

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| Afternoon Session II (Chair: Andrija Mihoci) | |
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| 15:30 – 15:45 | **Alice Buccioli (Aarhus University)**<br>**Portfolio Optimization in Contagious Markets** |
| 15:45 – 16:00 | **Xinwen Ni (Humboldt-Universität zu Berlin)**<br>**LDA application in the analysis of Christmas Songs, NASDAQ News and Shakespeare** |
| 16:00 – 16:15 | **Iryna Okhrin (Dresden University of Technology)**<br>**Sentiment Analysis for Movie Recommender System** |
| 16:15 – 16:30 | **Andrija Mihoci (Brandenburg University of Technology)**<br>**Adaptive Order Flow Forecasting with Multiplicative Error Models** |
| 18:00 – 20:00 | Dinner |

## Friday, 18.05.18

| Morning Session I (Chair: Sascha Voekler) | |
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| 10:00 – 10:15 | **Yegor Klochkov (Humboldt-Universität zu Berlin) and Jigao Yan (Soochow University)**<br>**Network autoregression with estimated adjacency matrix** |
| 10:15 – 10:30 | **Krzysztof Dmytrów (University of Szczecin)**<br>**Application of Multiple-Criteria Decision-Making techniques for selected take-out techniques in order-picking** |
| 10:30 – 10:45 | **Jan Večeř (Charles University Prague)**<br>**Dynamic Probability Scoring Rules, Statistical Martingale Testing and Model Selection** |
| 10:45 – 11:00 | **Anna Zalewska (Warsaw University of Technology)**<br>**Modified CoVaR in Portfolio Optimization** |

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| 11:00 – 11:15 | **Sascha Vökler (Brandenburg University of Technology)**<br>**Computational Intelligence in Product-line Optimization: Simulations and Applications** |
| 11:15 – 11:45 | Coffee Break |

| Morning Session II (Chair: Raphael Reule) | |
|---|---|
| 11:45 – 12:00 | **Jacek Batóg (University of Szczecin)**<br>**Estimation of Airport Noise Compensation for Real Estate Owners: Application of Cluster Analysis and GLMs (with dr hab. Iwona Foryś prof. US)** |
| 12:00 – 12:15 | **Georg Pflug (University of Vienna)**<br>**Stochastic Quasigradient Methods with Applications in Shape Optimization** |
| 12:15 – 12:30 | **Raphael Reule (Humboldt-Universität zu Berlin)**<br>**Programming and Prejudice: Interdisciplinary Regulation with Machine Learning Methods** |
| 12:30 – 12:45 | **Zdeněk Hlávka (Charles University Prague)**<br>**Detection of Change-Points in Martingale Difference Sequences** |
| 12:45 – 13:00 | **Closing Ceremony** |

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