| Schedule, 1st day<br>Saturday, February 01, 2020 | | |
|---|---|---|
| Time | | Lecturers and Titles of Talks |
| 8:00 | 9:25 | **Registration**<br>**Farmanieh Building, Institute for Research in Fundamental Sciences (IPM)** |
| 9:25 | 9:40 | **Welcome** [The Main Lecture Hall]<br>**Hirbod Assa**<br>*Head of* ***FINACT-IRAN Group*** |
| 9:40 | 10:00 | **Opening** [The Main Lecture Hall]<br>**Ahmad-Reza Zarrabieh**<br>*Chief Executive Officer of* ***Saman Insurance*** |
| 10:00 | 10:30 | **Coffee Break** |
| 10:30 | 11:00 | **Dan Kucerovsky** (page 11) [The Main Lecture Hall]<br>*University of New Brunswick, New Brunswick, Canada*<br>**Ruin probability** |
| 11:00 | 11:30 | **Shima Ara** (page 12) [The Main Lecture Hall]<br>*Saman Insurance Co., Tehran, Iran*<br>**On the importance of data mining methods in actuarial science** |
| 11:30 | 12:00 | **Amin Hassan Zadeh** (page 13) [The Main Lecture Hall]<br>*Shahid Beheshti University, Tehran, Iran*<br>**Mortality modeling of skin cancer patients with actuarial applications** |
| 12:00 | 12:30 | **Farbod Khanizadeh** (page 14) [The Main Lecture Hall]<br>*Insurance Research Center (IRC),Tehran, Iran*<br>**Use of decision tree in classifying customers of third-party liability motor insurance** |
| 12:30 | 13:45 | **Group Photo & Lunch** |
| 13:45 | 14:15 | **Jose Garrido** (page 18) [The Main Lecture Hall]<br>Concordia University, Montreal, Canada<br>**Deep neural networks with LSTM for human mortality modeling** |
| 14:15 | 14:45 | **Maryam Salmasi** (page 19) [The Main Lecture Hall]<br>*Taavon Insurance Co., Tehran, Iran*<br>**Risk identification with ERM approach in an insurance company: Taavon insurance company case study** |
| 14:45 | 15:15 | **Rahim Mahmoudvand** (page 25) [The Main Lecture Hall]<br>*Bu-Ali Sina University, Hamedan, Iran*<br>**Insurance pricing: From theory to reality** |
| 15:15 | 15:45 | **Coffee Break** |
| 15:45 | 17:05 | **Mostafa Pouralizadeh** [The Main Lecture Hall]<br>*Allameh Tabataba'i University, Tehran, Iran*<br>**Workshop on: Advances in Financial Machine Learning** (Part 1) |
| 17:05 | 17:20 | **Break** |
| 17:20 | 18:45 | **Mostafa Pouralizadeh** [The Main Lecture Hall]<br>*Allameh Tabataba'i University, Tehran, Iran*<br>**Workshop on: Advances in Financial Machine Learning** (Part 2) |

| Schedule, 2nd day<br>Sunday, February 02, 2020 | | |
|---|---|---|
| **Time** | | **Lecturers and Titles of Talks** |
| 8:30 | 9:00 | **Ali Foroush Bastani** (page 28) [The Main Lecture Hall]<br>*Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran*<br>**Solving parametric fractional differential equations arising from rough Heston model using quasi-linearization and spectral collocation** |
| 9:00 | 09:30 | **Ali Safdari-Vaighani** (page 29) [The Main Lecture Hall]<br>*Allameh Tabataba'i University, Tehran, Iran*<br>**An efficient pricing method for basket options under jump-diffusion model** |
| 09:30 | 10:00 | **Fazlollah Soleymani** (page 32) [The Main Lecture Hall]<br>*Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran*<br>**A jump-diffusion model when both underlying and volatility contain correlated Jumps** |
| 10:00 | 10:30 | **Coffee Break** |
| 10:30 | 11:00 | **Davood Ahmadian** (page 36) [The Main Lecture Hall]<br>*University of Tabriz, Tabriz, Iran*<br>**Pricing arithmetic Asian option using the control variate technique** |
| 11:00 | 11:30 | **Saghar Heidari** (page 37) [The Main Lecture Hall]<br>*Shahid Beheshti University, Tehran, Iran*<br>**Valuing equity-linked death benefits under phase-type models** |
| 11:30 | 12:00 | **Mostafa Pouralizadeh** (page 42) [The Main Lecture Hall]<br>*Allameh Tabataba'i University, Tehran, Iran*<br>**A machine learning approach to parametrize implied volatility in a risk managment** |
| 12:00 | 12:20 | **Soroush Amirhashchi** (page 46) [The Main Lecture Hall]<br>*Mellat Insurance Co., Tehran, Iran*<br>**Lapse risk modeling with machine learning techniques: a case study on Mellat …** |
| | | **Mahdiye Alijani** (page 49) [Class C] **In Persian**<br>*Allameh Tabataba'i University, Tehran, Iran*<br>**Option pricing under a class of time-changed Levy process** |
| | | **Samira Amirian** (page 53) [Class A] **In Persian**<br>*Amirkabir University of Technology, Tehran, Iran*<br>**Fractional Stochastic Volatility Models and Applications in Pricing** |
| 12:20 | 12:40 | **Alireza Fallahi** (page 57) [The Main Lecture Hall]<br>*Amirkabir University of Technology, Tehran, Iran*<br>**S&P 500 stock selection via factor analysis and principal component analysis** |
| | | **Fatemeh Atatalab** (page 61) [Class C] **In Persian**<br>*Shahid Beheshti University, Tehran, Iran*<br>**Non-life insurance reserve for solvency purposes** |
| | | **Parisa Davar** (page 65) [Class A] **In Persian**<br>*Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran*<br>**A Forecasting Model for Limit Order Book in Tehran Stock Exchange Using LSTM…** |

| Schedule, 2nd day, Sunday, February 02, 2020 | | |
|---|---|---|
| **Time** | | **Lecturers and Titles of Talks** |
| 12:40 | 13:00 | **Pegah Amiri** (page 69) [The Main Lecture Hall]<br>*Allameh Tabataba'i University, Tehran, Iran*<br>**Pricing Catastrophe bonds under a jump-diffusion interest rate model by Finite …** |
| | | **Fatemeh Ahangar Saryazdi** (page 73) [Class C] **In Persian**<br>*ECO College of Insurance, Allameh Tabataba'i University, Tehran, Iran*<br>**Insured's risk prediction in life insurance: Saman insurance case study** |
| | | **Oreinab Afrooz Kelardehi** (page 77) [Class A] **In Persian**<br>*Razi Insurance Co., Tehran, Iran*<br>**Fraud detection methods in health insurance Case study: An Iranian insurance Co.** |
| 13:00 | 14:10 | Lunch |
| 14:10 | 14:30 | **Mohammad Karimnejad Esfahani** (page 82) [The Main Lecture Hall]<br>*Allameh Tabataba'i University, Tehran, Iran*<br>**Pricing Insurance Bonds Using RBF Method** |
| | | **Farzaneh Anvari** (page 85) [Class C] **In Persian**<br>*Dana Insurance Co., Tehran, Iran*<br>**The relationship between behavioral orientation and investor behavior …** |
| | | **Mohammad Azardbad** (page 88) [Class A] **In Persian**<br>*Shahid Chamran University of Ahvaz, Ahvaz, Iran*<br>**Analysis of lapse risk with censored data: Mellat Insurance case study** |
| 14:30 | 14:50 | **Zahra Barzegar** (page 92) [The Main Lecture Hall] **In Persian**<br>*Saman Insurance Co., Tehran, Iran*<br>**A simulation-based internal solvency model for determining premium risk …** |
| | | **Saman Ebrahimpour** (page 93) [Class C] **In Persian**<br>*Shahid Beheshti University, Tehran, Iran*<br>**An early warning system for systemic risk using breakpoint regression** |
| | | **Diba Daraei** (page 98) [Class A] **In Persian**<br>*Shahid Beheshti University, Tehran, Iran*<br>**Life table construction of active insured members of social Insurance …** |
| 14:50 | 15:10 | **Monir Goudarzi** (page 102) [The Main Lecture Hall] **In Persian**<br>*Mellat Insurance Co., Tehran, Iran*<br>**Modeling and predicting health insurance claims in Mellat insurance company…** |
| | | **Tayebeh Zanganeh** (page 106) [Class C] **In Persian**<br>*Islamic Azad University, Science and Research Branch, Tehran, Iran*<br>**Dynamic Measurement of Iran Interbank Network Stability** |
| | | **Sara sadat Moosavi** (page 109) [Class A] **In Persian**<br>*Shahid Beheshti University, Tehran, Iran*<br>**Valuation of the new health product with a popular rider and limited benefits** |
| 15:10 | 15:30 | Coffee Break |
| 15:30 | 16:50 | **Jose Garrido** (page ) [The Main Lecture Hall]<br>Concordia University, Montreal, Canada<br>**Workshop on: Applications of Machine Learning to Insurance** (Part 1) |
| 16:50 | 17:05 | Break |
| 17:05 | 18:30 | **Jose Garrido** (page ) [The Main Lecture Hall]<br>Concordia University, Montreal, Canada<br>**Workshop on: Applications of Machine Learning to Insurance** (Part 2) |

| Schedule, 3rd day<br>Monday, February 03, 2020 | | |
|---|---|---|
| Time | | Lecturers and Titles of Talks |
| 8:30 | 8:55 | **Erfan Salavati** (page 113) [The Main Lecture Hall]<br>*Amirkabir University of Technology, Tehran, Iran*<br>**Mean Field Games in Finance** |
| 8:55 | 9:20 | **Mahmoud Botshekan – Ehsan Adman** (page 114) [The Main Lecture Hall]<br>*Isfahan University, Isfahan, Iran*<br>**Factor investing meets predictability** |
| 9:20 | 9:45 | **Ahmad Salahnejhad Ghalehjooghi** (page 119) [The Main Lecture Hall]<br>*Risk Managment Dept., Nationale-Nederlanden, The Netherlands*<br>**Socio-economic differentiation in experienced mortality modeling and its pricing implications** |
| 9:45 | 10:05 | Coffee Break |
| 10:05 | 10:30 | **Hirbod Assa** (page 120) [The Main Lecture Hall]<br>*University of Liverpool, UK*<br>**Examination of reinforcement learning method for hedging** |
| 10:30 | 11:15 | ***A Panel Discussion on "RiskLabs: Structure, Requirements, and Rules"***<br>*(moderator: Dr. Amir T. Payandeh)* |
| 11:15 | 11:40 | **Mohsen Yavari** (page 121) [The Main Lecture Hall]<br>*FaraBourse Iran Co., Tehran, Iran*<br>**Applying Islamic Repo in monetary policy** |
| | | **Ali Golbabaei** (page 122) [Class C] **In Persian**<br>*University of Isfahan, Isfahan, Iran*<br>**Mapping Capital Requirements to Bank Lending Spreads: The Role of …** |
| | | **Nader Karimi** (page 126) [Class A] **In Persian**<br>*Amirkabir University of Technology, Tehran, Iran*<br>**An investigation of demand for agricultural commodities in the presence of …** |
| 11:40 | 12:00 | **Abdollah Najar Firozjaei** (page 133) [The Main Lecture Hall]<br>*Dana Insurance Co., Tehran, Iran*<br>**An introduction to theoretical and historical aspects of evolutionary economics …** |
| | | **Mitra Ghanbarzadeh** (page 137) [Class C] **In Persian**<br>*Insurance Research Center, Tehran, Iran*<br>**A survey on data mining methods for customer Churn prediction in insurance …** |
| | | **Sadegh Miri** (page 141) [Class A] **In Persian**<br>*Amirkabir University of Technology, Tehran, Iran*<br>**Optimazation portfolio under uncertain condition** |
| 12:00 | 12:20 | **Nastaran Hadi Doolabi** (page 145) [The Main Lecture Hall]<br>*Tarbiat Modares University, Tehran, Iran*<br>**The main micro-structural components of the stock liquidity and intraday patterns** |
| | | **Somayeh Mireh** (page 150) [Class C] **In Persian**<br>*Insurance Research center, Tehran, Iran*<br>**Application of factor analysis in assessing the service quality of departments of …** |
| | | **Somayeh Mohammadi** (page 154) [Class A] **In Persian**<br>*University of Isfahan, Isfahan, Iran*<br>**Asset correlation and distance to default relationship, a case study of Iran** |

| Schedule, 3rd day<br>Monday, February 03, 2020 | | |
|---|---|---|
| **Time** | | **Lecturers and Titles of Talks** |
| **12:20** | **12:40** | **Fereshteh Shahbazin** (page 159) [The Main Lecture Hall]<br>*Islamic Azad University, Qazvin, Iran*<br>**Modeling and Evaluation Iran Mutual Funds Systemic Risk: A Conditional Value …** |
| | | **Sahar Salimi** (page 163) [Class A] **In Persian**<br>*Institute for Advanced Studies in Basic Sciences, Zanjan, Iran*<br>**Bilateral Counterparty Risk Valuation to Credit Default Swaps** |
| | | **Sahar Yaghoubi** (page 167) [Class C] **In Persian**<br>*Azarbaijan Shahid Madani University, Tabriz, Iran*<br>**Pricing of index-based catastrophe bonds based on Fourier cosine expansions** |
| **12:40** | **13:00** | **Khaled Masoumifard** (page 173) [The Main Lecture Hall] **In Persian**<br>*Shahid Beheshti University, Tehran, Iran*<br>**Stochastic optimization in correlated multiple insurance business lines** |
| | | **Amir Hossein Yaftian** (page 179) [Class C] **In Persian**<br>*Tarbiat Modares University, Tehran, Iran*<br>**Designing an automated trading system using image processing by a …** |
| | | **MohammadTaha Hoveizavi** (page 184) [Class A] **In Persian**<br>*Kharazmi University, Tehran, Iran*<br>**Model selection for value at risk with machine learning methods** |
| **13:00** | **13:10** | **Closing** |
| **13:10** | **14:30** | **Group Photo & Lunch** |
| **14:30** | **17:30** | **Visit "Plannet", please see plannet.ir (with workshop about Insurtech)** |

| Schedule, 4th day<br>Tuesday, February 04, 2020 | | |
|---|---|---|
| Time | | ***Titles of Workshops*** |
| 9:30 | 11:10 | **Ahmad Salahnejhad Ghalehjooghi** [Niavaran Building, Lecture Hall 1]<br>*Risk Managment Dept., Nationale-Nederlanden, The Netherlands*<br>**Workshop on: Experienced Mortality with Portfolio-specific Data** (Part 1) |
| 11:10 | 11:40 | **Coffee Break** |
| 11:40 | 13:20 | **Ahmad Salahnejhad Ghalehjooghi** [Niavaran Building, Lecture Hall 1]<br>*Risk Managment Dept., Nationale-Nederlanden, The Netherlands*<br>**Workshop on: Experienced Mortality with Portfolio-specific Data** (Part 2) |
| 13:20 | 14:30 | **Break for Lunch** |
| 14:30 | 16:00 | **Elshan Soltani** [Niavaran Building, Lecture Hall 1] **In Persian**<br>*Algorithmic Trading Advisor at Tosee-Melli Investment Co., Tehran, Iran*<br>**Workshop on: How to get into the world of algorithmic trading?** (Part 1)<br>**Zahra Barzegar** [Niavaran Building, Lecture Hall 2] **In Persian**<br>*Saman Insurance Co., Tehran, Iran*<br>**Workshop on: Spatial Statistics in Actuarial Science** (Part 1) |
| 16:00 | 16:15 | **Break** |
| 16:15 | 17:45 | **Elshan Soltani** [Niavaran Building, Lecture Hall 1] **In Persian**<br>*Algorithmic Trading Advisor at Tosee-Melli Investment Co., Tehran, Iran*<br>**Workshop on: How to get into the world of algorithmic trading?** (Part 2)<br>**Zahra Barzegar** [Niavaran Building, Lecture Hall 2] **In Persian**<br>*Saman Insurance Co., Tehran, Iran*<br>**Workshop on: Spatial Statistics in Actuarial Science** (Part 2) |