Norwegian-Ukrainian Winter School 2018 on Stochastic Analysis, Probability Theory and Related Topics

Programme

Place: Seminar room: "Gates of Eden" (2nd floor), Institute of Mathematics, Sognsveien 77B, Ullevål Stadion

Lectures: Monday, 22. January 2018

10:30-10:55: Registration for the winter school

11:55-11:05: Coffee break
11:05-11:15: Opening speech

11:15-12:00: Speaker: Professor Bernt Øksendal, University of Oslo, Norway
Title: "An introduction to stochastic control, with applications in mathematical finance", Part I

Chaired by Andriy Pylypenko

12:00-13:00: Lunch, 2nd floor

13:15-14:00: Speaker: Professor Bernt Øksendal, University of Oslo, Norway
Title: "An introduction to stochastic control, with applications in mathematical finance", Part II

14:00-14:15: Coffee break
14:15-15:00: Speaker: Professor Bernt Øksendal, University of Oslo, Norway
Title: "An introduction to stochastic control, with applications in mathematical finance", Part III

15:00-15:15: Tea break
15:15-16:45: Speaker: Professor Andriy Pylypenko, Institute of Mathematics, National Academy of Science of Ukraine, Kiev, Ukraine
Title: "The limit behavior of perturbed random walks, Part I"

Chaired by Yuriy Prykhodko
Lectures: Tuesday, 23. January 2018

09:15-10:00: Speaker: Professor Tom Lindstrøm, University of Oslo, Norway

Title: "Ultrafilter convergence of stochastic processes , Part I"

Chaired by Andriy Pylypenko
10:00-10:15: Coffee break
10:15-11:00: Speaker: Professor Tom Lindstrøm, University of Oslo, Norway

Title: "Ultrafilter convergence of stochastic processes , Part II"

11:00-11:15: Coffee break
11:15-12:00: Professor Andrii Ilienko, National Technical University of Ukraine, "Igor Sikorski Kyiv Polytechnic Institute", Kiev, Ukraine

Title: "Pigeonholes and around , Part I"

Chaired by Fabian Harang
12:00-13:00: Lunch, 2nd floor
13:15-14:00: Professor Andrii Ilienko, National Technical University of Ukraine, "Igor Sikorski Kyiv Polytechnic Institute", Kiev, Ukraine

Title: "Pigeonholes and around, Part II"

14:00-14:15: Coffee break
14:15-15:00: Professor Igor Orlovskyi, National Technical University of Ukraine, "Igor Sikorski Kyiv Polytechnic Institute", Kiev, Ukraine

Title: "Introduction to Functional Equations, Part I"

Chaired by Andrii Ilienko
15:00-15:15: Tea break
15:15-16:00: Professor Igor Orlovskyi, National Technical University of Ukraine, "Igor Sikorski Kyiv Polytechnic Institute", Kiev, Ukraine

Title: "Introduction to Functional Equations , Part II"
Excursion day: Wednesday, 24. January 2018

10:00: We meet at the Mathematics Institute, Sognsveien 77B, Ullevål Stadion and take from Gaustad the tram to Holmenkollen.

11:00: Guided tour in the Ski museum and the Jump tower.

13:00: We take the tram to Vindern and go to Blindern, where the University of Oslo is located.

14:00: Lunch in Blindern.

15:00: We take a tour downtown and go e.g. to the King's Castle.

18:30: We meet for dinner at Trattoria Popolare, Trondheimsveien 2.
Lectures: Thursday, 25. January 2018

09:15-10:00: Dr. Achref Bachouch, University of Oslo, Norway
Title: "Longstaff-Schwarz algorithm for the valuation of American-Bermuda options"
Chaired by Igor Orlovskyi

10:00-10:15: Coffee break

10:15-11:00: Professor Artem Baiev, Vasyl’ Stus Donetsk National University, Vinnitsa, Ukraine
Title: "Stochastic methods for machine learning, Part I"
Chaired by Achref Bachouch

11:00-11:15: Coffee break

11:15-12:00: Professor Artem Baiev, Vasyl’ Stus Donetsk National University, Vinnitsa, Ukraine
Title: "Stochastic methods for machine learning, Part II"
12:00-13:00: Lunch, 2nd floor

13:15-14:00: Joint presentation by Professor Yurii Mlavets, Professor Yurii Kozachenko and Dr. Olga Syniavska, Uzhgorod National University, Uzhgorod, Ukraine
Title: "Sub-Gaussian random variables and stochastic processes, Part I"
Chaired by Artem Baiev

14:00-14:15: Coffee break

14:15-15:00: Joint presentation by Professor Yurii Mlavets, Professor Yurii Kozachenko and Dr. Olga Syniavska, Uzhgorod National University, Uzhgorod, Ukraine
Title: "Sub-Gaussian random variables and stochastic processes, Part II"

15:00-15:15: Tea break
15:15-16:00: Speaker: Professor Andriy Pylypenko, Institute of Mathematics, National Academy of Science of Ukraine, Kiev, Ukraine
Title: "The limit behavior of perturbed random walks, Part II"
Chaired by Yurii Mlavets
Lectures: Friday, 26. January 2018

09:15-16:00: Lecture series of Professor Andrii Dorohovtsev, Institute of Mathematics, National Academy of Science, Kiev, Ukraine

Title: "Stochastic anticipating equations"

Chaired by Andrey Pilipenko
with coffee/tea breaks and lunch in between as before.