

Doctoral Workshop on Decision Mathematics and Statistics

Tuesday, 6th July 2021

Organizing Committee: Abdelaati Daouia, Sébastien Gadat, Christine Thomas-Agnan

Conference Secretariat: Aline Soulié, Corinne Vella

20 mns are devoted to each presentation: 15 mns for the presentation and 5 mns for the discussion with the floor

09:30 – 09:35 Introduction by Sébastien Gadat

09:35 – 10:35 Session 1: Statistics, Deep learning, Games - Chairwoman: Anne Ruiz-Gazen

- 09:35 – 09:55 **Yasser Abbas**
"Improving heavy-tailed expectile regression"
- 09:55 - 10:15 **Camille Castera**
"Stochastic algorithms exploiting second-order information for deep learning"
- 10:15 - 10:35 **Tommaso Cesari**
"A Regret Analysis of Bilateral Trade"
- 10:35 - 11:00 **Break**

11:00 - 12:00 Session2: Games, Statistics, Optimization - Chairman: Jérôme Bolte

- 11:00 - 11:20 **Maurizio D'Andrea**
"No-regret strategies and coordination"
- 11:20 - 11:40 **Lukas Dargel**
"Revisiting Estimation Methods for Spatial Econometric Interaction Models"
- 11:40 -12:00 **Radu-Alexandru Dragomir**
"Bregman gradient methods in optimization"
- 12:00 - 14:00 **Lunch break**

14:00 - 15:00 Session 3: Deep learning, Statistics, Optimization - Chairwoman: Bénédicte Alziary

- 14:00 - 14:20 Ngoc Tâm Lê**
"Convergence of online deep learning with automatic differentiation"
- 14:20 - 14:40 Estelle Medous**
"Uses and comparison of General Weight Share Method and double General Weight Share Method in surveys"
- 14:40 - 15:00 Étienne de Montbrun**
"Wasserstein Generative Adversarial Networks and/or 1-Lipschitz Neural Network"
- 15:00 - 15:20 Break**

15:20 - 16:40 Session 4: Games, Optimization, Machine learning, Statistics - Chairman: Jérôme Renault

- 15:20 - 15:40 Dana Pizarro**
"On a Competitive Selection Problem with Recall"
- 15:40 - 16:00 Rodolfo Rios-Zertuche**
"Long term dynamics of small step optimization methods"
- 16:00 - 16:20 Tony Silveti-Falls**
"Nonsmooth implicit differentiation for machine learning"
- 16:20 - 16:40 Antoine Usseglio Carleve**
"Extreme expectile regression from dependent data"

16:40 - 16:45 Conclusion by Christine Thomas-Agnan