

HORAIRE / *PROGRAM*

ATELIER

DÉFIS MODERNES EN THÉORIE DE L'APPRENTISSAGE

23 au 26 avril 2018

WORKSHOP ON

MODERN CHALLENGES OF LEARNING THEORY

April 23–26, 2018

CONFÉRENCES : salle 6254 (Pavillon André-Aisenstadt)

PAUSES-CAFÉ : salle 6245 (Pavillon André-Aisenstadt)

LECTURES: *Room 6254 (Pavillon André-Aisenstadt)*

COFFEE BREAKS: *Room 6245 (Pavillon André-Aisenstadt)*

Le lundi 23 avril 2018 / Monday, April 23, 2018

09:00–09:30 Inscription (salle 5345) et café-croissants (salle 6245)
Registration (Room 5345) and Coffee & Croissants (Room 6245)

09:30–10:30 Peter L. Bartlett (University of California, Berkeley)
“Representation, optimization and generalization properties of deep neural networks”

10:30–11:00 Pause-café / *Coffee break*

11:00–12:00 Gérard Ben Arous (New York University)
“Complexity of Tensor PCA and of its optimization dynamics”

12:00–13:30 Pause-déjeuner / *Lunch break*

13:30–14:30 Marc G. Bellemare (Google Brain Montréal)
“A distributional perspective on reinforcement learning”

14:30–15:00 Pause-café / *Coffee break*

15:00–16:00 Sham M. Kakade (University of Washington)
“Sub-linear reinforcement learning”

16:30–17:30 Yoshua Bengio (Université de Montréal)
“Figuring out the magic behind backprop and SGD”

Le mardi 24 avril 2018 / Tuesday, April 24, 2018

09:00–09:30 Café croissants / *Coffee & Croissants*

09:30–10:30 Alexander Rakhlin (MIT)

“Sufficient statistics for online prediction via the Burkholder method”

10:30–11:00 Pause-café / *Coffee break*

11:00–12:00 Grigoris Paouris (Texas A&M University)

“The “Small ball” property in high dimensional measures”

12:00–13:30 Pause-déjeuner / *Lunch break*

13:30–14:30 Csaba Szepesvári (University of Alberta)

“Completing the classification of adversarial partial monitoring games”

14:30–15:00 Pause-café / *Coffee break*

15:00–16:00 Alexandra Carpentier (Universität Potsdam)

“Adaptivity to smoothness in X-armed bandits”

Le mercredi 25 avril 2018 / Wednesday, April 25, 2018

09:00–09:30 Café croissants / *Coffee & Croissants*

09:30–10:30 Nicolò Cesa-Bianchi (Università degli Studi di Milano)
“Nonstochastic bandits with anonymous feedback”

10:30–11:00 Pause-café / *Coffee break*

11:00–12:00 Emilie Kaufmann (Inria Lille - Nord Europ)
“Bandit (for) games”

12:00–13:30 Pause-déjeuner / *Lunch break*

13:30–14:30 Daniel Hsu (Columbia University)
“Learning without correspondence”

14:30–15:00 Pause-café / *Coffee break*

15:00–16:00 Nicolas Le Roux (Google Brain - Montréal)
“An exploration of variance reduction techniques in stochastic optimization”

16:30–17:30 Audrey Durand (McGill University)
“Streaming kernel regression with provably adaptive mean, variance, and regularization”

Le jeudi 26 avril 2018 / *Thursday, April 26, 2018*

09:00–09:30 Café croissants / *Coffee & Croissants*

09:30–10:30 Gergely Neu (Universitat Pompeu Fabra)
“A unified view of entropy-regularized Markov decision processes”

10:30–11:00 Pause-café / *Coffee break*

11:00–12:00 Nicolas Broutin (Sorbonne Université)
“Combinatorics of colliding bullets”

12:00–13:30 Pause-déjeuner / *Lunch break*

13:30–14:30 András György (Imperial College London)
“A modular analysis of adaptive online (non-)convex optimization”

14:30–15:00 Pause-café / *Coffee break*

15:00–16:00 Gautam Kamath (MIT)
“Robustness in unsupervised and supervised machine learning”

16:30–17:30 Andreas Maurer
“Concentration properties and examples of functions with weak interactions”