

Geometry and Learning from Data Tutorials

Tuesday March 12, 2019

- 8:00–8:55 *Check-In/Light Breakfast (Hosted by IPAM)*
- 8:55–9:00 *Welcome & Opening Remarks: Dean Miguel García-Garibay (Dean of Physical Sciences, UCLA) and Dima Shlyakhtenko (Director, IPAM)*
- 9:00–10:00 **Michael Bronstein** (Imperial College London)
Geometric deep learning for 3D shape analysis - Part 1
- 10:00–10:20 *Break*
- 10:20–11:20 **Michael Bronstein** (Imperial College London)
Geometric deep learning for 3D shape analysis - Part 2
- 11:20–12:00 *Core Orientation with IPAM Staff*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Tyler Maunu** (Massachusetts Institute of Technology)
Robust Methods for Structured Data Problems - Part 1
- 3:00–3:20 *Break*
- 3:20–4:20 **Tyler Maunu** (Massachusetts Institute of Technology)
Robust Methods for Structured Data Problems - Part 2

Wednesday March 13, 2019

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:30 **David Xianfeng Gu** (SUNY Stony Brook)
An Optimal Transportation (OT) View of Generative Adversarial Networks (GANs) - Part 1
- 10:30–10:50 *Break*
- 10:50–11:50 **David Xianfeng Gu** (SUNY Stony Brook)
An Optimal Transportation (OT) View of Generative Adversarial Networks (GANs) - Part 2
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Rongjie Lai** (Rensselaer Polytechnic Institute)
Solving Geometric PDEs on 3D Shapes and Applications - Part 1
- 3:00–3:20 *Break*
- 3:20–4:20 **Rongjie Lai** (Rensselaer Polytechnic Institute)
Solving Geometric PDEs on 3D Shapes and Applications - Part 2



Thursday March 14, 2019

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:30 **Guido Montufar** (University of California, Los Angeles (UCLA))
Wasserstein Information Geometry for Learning from Data - Part 1
- 10:30–10:50 *Break*
- 10:50–11:50 **Guido Montufar** (University of California, Los Angeles (UCLA))
Wasserstein Information Geometry for Learning from Data - Part 2
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Arthur Szlam** (Facebook)
Neural processing with multi-hop attention
- 3:00–3:20 *Break*
- 3:20–4:20 **Arthur Szlam** (Facebook)
Datasets and models for engaging conversational agents

Friday March 15, 2019

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:30 **Laurent Younes** (Johns Hopkins University)
Introduction to Metric Registration - Part 1
- 10:30–10:50 *Break*
- 10:50–11:50 **Laurent Younes** (Johns Hopkins University)
Introduction to Metric Registration - Part 2
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Xavier Bresson** (Nanyang Technological University, Singapore)
Tutorial on Spectral and Graph ConvNets - Part 1
- 3:00–3:20 *Break*
- 3:20–4:20 **Xavier Bresson** (Nanyang Technological University, Singapore)
Tutorial on Spectral and Graph ConvNets - Part 2

