

NSF NRT Annual Graduate Trainee Symposium on Machine Learning and Physical Sciences (MAPS)

Wednesday, May 30, 2018

10:00 am - 10:05 am	<p>Welcome</p> <p>Professor Padhraic Smyth Department of Computer Science University of California, Irvine</p>
10:05 am - 10:15 am	<p><i>“Deep learning in high energy physics”</i></p> <p>Julian Collado (Computer Science), Gregor Urban (Computer Science), Daniel Guest (Physics & Astronomy), Shih-Chieh Hsu (Physics, University of Washington), Daniel Whiteson (Physics & Astronomy), Pierre Baldi (Computer Science)</p>
10:15 am - 10:25 am	<p><i>“Learning Physics from the Machine”</i></p> <p>Taylor Faucett (Physics and Astronomy), Daniel Whiteson (Physics & Astronomy), Edison Weik (Physics & Astronomy), Jesse Thaler (Center for Theoretical Physics, MIT)</p>
10:25 am - 10:35 am	<p><i>“Statistical methods for prediction and forecasting of fire events in Alaskan boreal forests”</i></p> <p>Casey Graff (Computer Science), Shane Coffield (Earth Systems Science), Yang Chen (Earth Systems Science), Efi Foufoula-Georgiou (Civil & Environmental Engineering), James T. Randerson (Earth Systems Science), and Padhraic Smyth (Computer Science)</p>
10:35 am - 10:45 am	<p><i>“Human Carbon-Cycle Feedbacks to Global Warming May Offset Natural Feedbacks”</i></p> <p>Dawn Woodard (Earth Systems Science), Steven J. Davis (Earth Systems Science), and James T. Randerson (Earth Systems Science)</p>
10:45 am - 10:55 am	<p><i>“Arctic sea-ice thickness variability and its influence on the atmospheric response to projected sea ice loss”</i></p> <p>Zachary Labe (Earth Systems Science), Yannick Peings (Earth System Science), Hal Stern (Statistics), and Gudrun Magnusdottir (Earth System Science)</p>
10:55 am - 11:05 am	<p><i>“Infrared Contributions of X-ray Selected Active Galactic Nuclei in Dusty Star-forming Galaxies”</i></p> <p>Arianna Brown (Physics & Astronomy), Hooshang Nayyeri (Physics and Astronomy), Asantha Cooray (Physics and Astronomy), Jingzhe Ma (Physics & Astronomy), Ryan C. Hickox (Physics & Astronomy, Dartmouth College), and Mojegan Azadi (Harvard-Smithsonian Center for Astrophysics)</p>

11:05 am - 11:15 am	<p><i>“Development and Progress of an Improved Chemical Shift Prediction Algorithm”</i></p> <p>Kyle W. Roskamp (Chemistry), Eric Casavant (Physics & Astronomy), Carter T. Butts (Sociology, Statistics), Rachel W. Martin (Chemistry)</p>
11:15 am - 11:25 am	<p><i>“SHERPA: Hyperparameter Optimization for Machine Learning Models”</i></p> <p>Lars Hertel (Statistics), Peter Sadowski (Computer Science), Julian Collado (Computer Science), Pierre Baldi (Computer Science)</p>
11:30 am - 12:15 pm	<p>Keynote Speaker:</p> <p><i>“From Space to Cyberspace: How is Big Data Changing Astronomy (and Other Fields)”</i></p> <p>Professor George Djorgovski Department of Physics, Mathematics and Astronomy California Institute of Technology</p>
12:15 pm - 12:20 pm	<p>Closing Remarks</p> <p>Professor Padhraic Smyth Department of Computer Science University of California, Irvine</p>
12:20 pm - 1:30 pm	<p>Lunch and Networking</p>