

Program of Winter School on Remote Sensing of Exoplanets

Time	Thursday, December 4 th	Friday, December 5th th
9:00- 9:10 am	Welcome remarks Adriana Predoi-Cross University of Lethbridge	ExoMol: New molecular line lists for exoplanets and other hot atmosphere
9:10-10:15 am	The search for habitable Planets Georg Mellau Justus Liebig University, Giessen, Germany and MIT, USA	Sergey Yurchenko University College London, London, UK
10:15-10:45 am	Coffee break	Coffee break
10:45 am-12 pm	Spectroscopy for Cool Astronomical Objects Peter Bernath Old Dominion University, Norfolk, Virginia, USA (WebEx lecture)	An Introduction to Atmospheric Retrieval: Applications to Exoplanets and Brown Dwarfs Michael Line University of California, Santa Cruz, USA (WebEx lecture)
12-1 pm	Lunch break	Lunch break
1-2 pm	An introduction to exoplanetary detection Ingo Waldmann University College London, London, UK	Data analysis of exoplanetary atmospheres: Working at the limits of instrument sensitivity Ingo Waldmann University College London, UK
2-3 pm	Calculating molecular opacities for exoplanetary atmospheres from first principles Sergey Yurchenko University College London, London, UK	Emission spectra of hot small molecules Georg Mellau Justus Liebig University, Giessen, Germany and MIT, USA
3-3:30 pm	Coffee break	Coffee break
3:30-4:30 pm	Direct Imaging of Extrasolar Planets: Bulk Properties via Disk-Averaged Multi-Spectral Images Katie Morzinski Steward Observatory, University of Arizona, USA (WebEx lecture)	The Far-Infrared Astrophysical roadmap: key science and technology development for the next generation of space-based far-infrared astrophysics experiments Locke Spencer University of Lethbridge

