

	Monday June 12		Tuesday June 13		Wednesday June 14	
8:30 - 9 AM	Coffee & danish		Coffee & danish		Coffee & danish	
9 AM - Noon (Coffee break 10:20-10:40 AM)	Exoplanets 101		Theory of transmitted light		Reflected and emitted light	
	Topics	Instructors	Topics	Instructor	Topics	Instructor
	<ul style="list-style-type: none"> Basics of exoplanet detection techniques, large surveys Exoplanet statistics and demographics Planet formation and evolution Review of important results & open questions 	René Doyon & David Lafrenière (UdeM)	<ul style="list-style-type: none"> Horizontal radiative transfer in atmosphere Transit geometry, transit light curve & spectroscopy Effects of varying atmosphere composition, temperature & gravity Observational results 	Eliza Kempton (Grinnell College)	<ul style="list-style-type: none"> Vertical radiative transfer, emission spectrum Irradiated vs isolated atmospheres Temperature inversion Observation of directly imaged planets, secondary eclipses 	Mike Line (Arizona State University)
Noon - 1:30 PM	Lunch		Lunch		Lunch	
1:30 - 4:30 PM (Coffee break 3:00 - 3:20 PM)	Exoplanet atmospheres 101		Clouds		Atmospheric dynamics	
	Topics	Instructor	Topics	Instructor	Topics	Instructor
	<ul style="list-style-type: none"> Hydrostatic equilibrium Shortwave and longwave radiation Opacity: optically thick and thin limits Convective instability Limiting temperature structures: adiabats and isotherms 	Nicolas Cowan (McGill)	<ul style="list-style-type: none"> Observation of aerosols, effect on transit spectrum Cloud condensation: vertical mixing and horizontal advection Cloud decks, particle size, and optical properties Haze production and optical properties 	TDB	<ul style="list-style-type: none"> Energy balance, day-night asymmetry, heat redistribution Thermal wind and super-rotation Phase curve observations Eccentricity seasons and eccentric phase curves 	Nikole Lewis (STScI)