

	Tuesday June 19		Wednesday June 20		Thursday June 21	
8:30 - 9 AM	Coffee & danish		Coffee & danish		Coffee & danish	
9 AM - Noon (Coffee break 10:20-10:40 AM)	Introduction to galaxies		Distant galaxies		Clusters of galaxies	
	Topics	Instructor	Topics	Instructor	Topics	Instructor
	<ul style="list-style-type: none"> • Quick review of main sequence stars • Galaxy types and the "Hubble Diagram" • Basics of galactic structure and stellar orbits • The Milky Way (structure, tidal streams, Galactic Center) • The Magellanic Clouds and our Local Group 	Daryl Haggard (McGill)	<ul style="list-style-type: none"> • Growing disks in galaxies • Star formation processes • Building bulges in galaxies • Feedback processes at high-redshift 	Sarah Gallagher (Western University)	<ul style="list-style-type: none"> • Definitions and descriptions of galaxy clusters and groups • Cluster/group survey techniques and status of the field • Galaxy populations within clusters and groups: demographics and trends • The hot gas and dark matter halos in clusters/groups • Galaxy cluster/group formation and evolution • AGN feedback processes in galaxy groups/clusters 	Tracy Webb (McGill)
Noon - 1:30 PM	Lunch & Galaxies in the era of JWST (R. Doyon - UdeM)		Lunch		Lunch	
1:30 - 4:30 PM (Coffee break 3:00 - 3:20 PM)	Local galaxies		Numerical methods		Cosmological probes	
	Topics	Instructor	Topics	Instructor	Topics	Instructor
	<ul style="list-style-type: none"> • The local galaxy population: basic structure and demographics • The galactic ecosystem: the ISM, star formation, and feedback • Stars, gas, size and mass: local galaxy scaling relations • Galaxy groups and clusters: environmental effects • Isolated galaxies: secular evolution • Nearby galaxies at your fingertips: large galaxy surveys now and in the future 	Kristine Spekkens (RMC)	<ul style="list-style-type: none"> • Numerical simulations: basic concepts • Specific problems in galaxy formation and evolution • Gravity-only simulations • Gas dynamics in simulations. • Subgrid physics: star formation, feedback, chemical enrichment, AGN • Interaction with environment; supergrid physics 	Hugo Martel (U Laval)	<ul style="list-style-type: none"> • How are galaxies a probe of cosmology? • What do we hope to learn by studying the density field? • How do we quantify the statistics of the density field in a way that connects to observations? • What do these functions look like and what are their current state of the art values? • Cosmology as it relates to the growth of structure • The Sunyaev-Zeldovich Effect and observations of galaxy clusters • Cluster surveys as a probe of dark energy 	Adrian Liu & Matt Dobbs (McGill)