Wed Jan 25 - The School 08:30 Registration Desk Opens	Thu Jan 26 - Workshop Day 1 08:30 Registration Desk Opens	Fri Jan 27 - Workshop Day 2 08:30 Registration Desk Opens	Sat Jan 28 - Workshop Day 3 09:00 Registration Desk Opens
09:00-10:30 Jeremy Heyl Review of General Relativity and ways in which it has been tested	08:55 Workshop Starts Welcome from organizers 09:00-09:30 Pedro Ferreira A complete framework for testing gravity on cosmological scales 09:30-10:00 Mark Trodden 10:00-10:30 Eric Adelberger	09:00-09:30 Cliff Burgess Effective field theories and modifying gravity: The view from below 09:30-10:00 Austin Joyce 10:00-10:30 Hartmut Abele	09:30-10:00 Bhuvnesh Jain Astrophysical tests 10:00-10:20 Richard Shaw Probing Dark Energy with CHIME 10:20-10:30 Mustapha Ishak Cosmological consistency tests of gravity theory and cosmic acceleration
11:00-12:30 Dimitrios Psaltis Gravity waves	11:00-11:30 Bruce Allen Direct observation of gravitational waves from the merger and inspiral of two black holes 11:30-12:00 Frans Pretorius Testing GR and constraining alternative theories with LIGO observations 12:00-12:15 Kent Yagi What do GW150914 and GW151226 tell us about extreme gravity? 12:15-12:30 Leo Stein Black hole mergers: beyond general relativity	11:00-11:30 Maxim Pospelov State of dark matter 11:30-12:00 Justin Khoury Cosmic acceleration without dark energy 12:00-12:15 Cedric Deffayet Partial masslessness beyond Einstein 12:15-12:30 David Langlois Degenerate higher order scalar tensor theories beyond Horndeski	11:00-11:20 Scott Menary The ALPHA-G experiment 11:20-11:40 Masha Baryakhtar Searching for ultralight particles with black holes and gravitational wave 11:40-11:55 Philippe Brax Gravitational birefringence 11:55-12:10 Shinji Tsujikawa Cosmology in generalized Proca theories 12:10-12:20 Joel Bergé MICROSCOPE on its way to the tightest test of the Weak Equivalence Principle 12:20-12:30 Matteo Fasiello LSS probes for dark energy & modified gravity?
Lunch Break	Lunch Break	Lunch Break	Lunch Break

12:30-13:30 (various locations)	12:30-14:00 (various locations)	12:30-14:00 (various locations)	12:30-14:00 (various locations)
13:30-15:00 Lam Hui Review of cosmology and the cosmological and astrophysical tests of gravity	14:00 Joy Johnson Welcome from VPR 14:05-14:35 Holger Muller 14:35-15:05 Clare Burrage Experimental searches for screened dark energy 15:05-15:20 Tim Kovachy Testing the equivalence principle with macroscopic atom interferometers	14:00-14:30 Ingrid Stairs Strong-field gravity with pulsars 14:30-15:00 Claudia de Rham Binary pulsar tests of gravity 15:00-15:15 Niayesh Afshordi Echoes from the abyss 15:15-15:30 Tanmay Vachaspati Quantum radiation during gravitational collapse	14:00-14:10 Alexander Vikman Canonical exorcism for cosmological ghosts 14:10-14:20 Yin-Zhe Ma Constraining gravity and primordial non-Gaussianity with cosmological observations 14:20-14:30 Danielle Leonard Testing gravity with EG: Mapping theory onto observation
	15:20-15:35 Jay Tasson Testing local Lorentz invariance with gravitational waves		14:30-14:40 Sheila Dwyer Prospects for gravitational wave observations: update from LIGO 14:40-14:50 Daniel D'Orazio Tools for characterizing a massive black hole binary population 14:50-15:30 Lam Hui

15:30-17:00 Justin Khoury Alternative gravity theories

16:00-16:10 **Aaron Zimmerman**

The horizon modes of black holes

16:10-16:20 Alex Nielsen

Testing black hole ringdowns with gravitational waves

16:20-16:30 Hiromi Saida

GR effect and mass of the massive BH at the center of our galaxy

16:30-16:40 **David Rapetti** Modeling and constraining the

16:00-16:30 Misao Sasaki

Signatures from inflationary massive gravity

16:30-17:00 Will Percival

Final cosmological measurements from BOSS

17:00-17:30 Roy Maartens

Cosmology on ultra-large scales with the SKA

Workshop Ends

Light boson dark matter + conference summary

cluster mass function to test gravity at large scales

16:40-18:00 **Very Short Talks**

Registration Open Until 19:00 Poster Session and Reception **18:00-20:00** (snacks & cash bar)

Conference Dinner 19:00 (<u>Dockside</u> on Granville Island)