

Wed Jan 18 The School 8:00 Registration Desk Opens	Thu Jan 19 Workshop Day 1 8:00 Registration Desk Opens	Fri Jan 20 Workshop Day 2 8:30 Registration Desk Opens	Sat Jan 21 Workshop Day 3 9:00 Registration Desk Opens
9-10:10 Lecture 1: <i>Introduction to General Relativity and ways of testing it</i> Pedro Ferreira (Oxford)	8:55-10:30 8:55 <i>Welcome from the organizers and SFU Dean of Science, Angela Brooks-Wilson</i> Pedro Ferreira: <i>From Cosmology to Ringdown</i> (30') Jess McIver: <i>Testing GR with LIGO-Virgo and future GW detectors</i> (30') Michael Ross: <i>Laboratory Tests of Gravity by the Eöt-Wash Group</i> (25')	9-10:30 Will Percival: <i>Super-sample covariance and patch-to-patch variations in the Universe</i> (30') Marco Raveri: <i>Cosmological tensions and reconstruction of gravity</i> (30') Bartolomeo Fiorini: <i>Studying large-scale structure probes of modified gravity with COLA</i> (10') Joseph Howlett: <i>Nuclear matter sensing of new forces at submicron scale</i> (20')	9:30-10:30 Jeremy Sakstein: <i>Black Hole Archaeology</i> (30') Hayley Macpherson: <i>Fully nonlinear ray-tracing in cosmological simulations with numerical relativity</i> (30')
Coffee Break	10:30-11	10:30-11	10:30-11
10:30–11:40 Lecture 2: <i>Alternative gravity theories and their phenomenology</i> Lam Hui (Columbia) 11:45–12:35 Lecture 3: <i>Astrophysical tests of General Relativity</i> Jeremy Sakstein (Hawaii)	11-12:30 Ruth Gregory: <i>Testing Higher Derivative Gravity Through Tunnelling</i> (30') Emanuele Berti: <i>Black hole spectroscopy: a status report</i> (30') Cliff Burgess: <i>Yoga DE and Axion Homeopathy</i> (30')	11-12:30 Mark Trodden: <i>Coupled Early Dark Energy</i> (30') Armen Sedrakian: <i>Multi messenger astrophysics constrains on dense matter in compact stars</i> (30') Alex Batrakov: <i>Testing scalar-tensor gravity with radio pulsars</i> (10') Qiuyue Liang: <i>Detecting the stochastic gravitational wave background from massive gravity with pulsar timing arrays</i> (10') Hajime Sotani: <i>Universal relation in supernova gravitational waves</i> (10)	11-12:30 Misao Sasaki: <i>Primordial Black Holes from Non-perturbative non-Gaussian Tails</i> (30') RAPID TALKS SESSION 2 (60')
Lunch Break (buy your own)	12:30-2	12:30-2	12:30-2
1:50-3:00 Lecture 4: <i>Gravitational waves and their sources</i> Emanuele Berti (John Hopkins) 3:05-4:00 Lecture 5: <i>Cosmological tests of gravity</i> Alessandra Silvestri (Leiden)	2-3:30 Gopolang Mohlabeng: <i>Review of Dark Matter</i> (30') Valerio De Luca: <i>A Primordial Black Hole Story</i> (15') Tessa Baker: <i>Testing cosmological gravity with gravitational waves</i> (15') Hartmut Abele: <i>Gravity resonance spectroscopy, and a search for Lorentz violation, beyond-Riemann and entropic gravity</i> (30')	2-3:30 Lia Medeiros: <i>New test of the black hole metric with EHT images of Sgr A*</i> (30') Frans Pretorius: <i>On the dynamical stability of AdS black bubbles</i> (30') Jiro Soda: <i>A peak in primordial GW spectrum induced by magnetic fields</i> (10') Kiana Salehi: <i>Shadow Implications: What does measuring the photon ring imply for gravity</i> (10') Adam Solomon: <i>Symmetries of black hole perturbation theory</i> (10')	2-3:35 Niayesh Afshordi: <i>Precision Quantum Cosmology</i> (30') Sugumi Kanno: <i>Graviton non-gaussianity in a-vacuum</i> (10') Lam Hui: <i>Recent developments in black hole perturbation theory</i> (30') Ramin Daghigh: <i>Spacetime metrics and ringdown waveforms for galactic black holes surrounded by a dark matter spike</i> (15') Sam Wong: <i>The Weak Gravity Conjecture and Black Hole Tidal Love numbers</i> (10')
Coffee Break	3:30-4	3:30-4	3:35-4
4:30-5:30 <i>Renaissance of General Relativity</i> Clifford Will (Florida)	4-6 pm Claudia de Rham: <i>Causality in the Sky</i> [30'] Mark Kasevich: <i>Testing gravity and quantum mechanics with atom interferometry</i> (30') Chukman So: <i>HAICU - developing an antihydrogen fountain interferometer</i> (10') RAPID TALKS SESSION I (50')	4-5:35 pm Silke Weinfurtnr: <i>Primary thermalisation mechanism of Early Universe observed from Faraday-wave scattering on liquid-liquid interfaces</i> (25') Sam Patrick: <i>Superradiance around quantum vortices</i> (10') Benjamin Elder : <i>Screened modified gravity and muonium</i> (10') Leah Jenks: <i>Aspects of Rotating Black Holes in Dynamical Chern-Simons</i> (10') Tanmay Vachaspati: <i>Unexciting backgrounds</i> (25') Bill Unruh: <i>LIGO shows macroscopic objects are quantum</i> (15')	4-5:10 pm Alice Garoffolo: <i>Testing gravity on cosmological scales with gravitational waves</i> (10') Meng-Xiang Lin: <i>Gravitational wave propagation beyond General Relativity and its degeneracies with lensing</i> (10') Alejandro Cardenas-Avendano: <i>Testing general relativity using black hole photon rings</i> (10') Justin Khoury: <i>Our universe at criticality: folding funnels and percolation</i> (30') Conference Summary (10')
Registration Open until 7 pm	6-8 pm POSTER SESSION and Reception	7 pm Banquet at Al Porto (doors open at 6:30)	