An EVENING with EINSTEIN







On the occasion of the 100th anniversary of the General Theory of Relativity (Nov 25th, 1915)

Also the centenary year of UBC

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On Nov 25th, 1915, Einstein submitted for publication the final version of his "General Theory of Relativity".

This gave us the most important change in our understanding of the universe since Newton in 1687.

It ushered in a new era of "modern physics", in which the reach of physics extended to the furthest parts of the universe, and then, 10 yrs later, with the discovery of Quantum Mechanics to the tiniest scales imaginable – far smaller than the atomic nucleus.

The Revolution had begun.

A page from Einstein's notebooks on the General Theory of Relativity.

This evening we will celebrate 2 great achievements of Einstein:
(i) Quantum Mechanics & Bose-Einstein condensation → superconductivity
(ii) Gravity & Curved Spacetime → Cosmology and Black Holes







Large Hadron Collider (LHC) CERN, Geneva

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Manufacturing of superconducting coils











Bending the Particles with Magnetic Fields







Cryodipole cross-section





23 km of superconducting magnets







MRI : Magnetic Resonance Imaging



History of T_c



The sole end of science is the honor of the human mind Carl Gustav Jacobi

The greatest economic benefits of scientific research have always resulted from advances in fundamental knowledge rather than the search for specific applications

Margaret Thatcher





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Gravity is

the inequable flow of Time

from place to place.

(not-- gravity causes time to flow inequably)

Matter causes adjacent Light rays to focus in spacetime

(Dyson & Eddington 1919)

Penrose--- This implies the existence of Black Holes.

GENERAL INFO:

If you want to look at all this in more detail (including slides and the video presentations) go to:

http://pitp.physics.ubc.ca/quant_lect/upcoming.html (FOR FUTURE EVENTS)

http://pitp.physics.ubc.ca/quant_lect/archives.html (ARCHIVES OF PAST LECTURES)





If you want to be on the mailing list for future events/lectures, just send an email to

pitpoffice@phas.ubc.ca