

Curriculum Vitae
Justin K. Keung
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Research Interests

My primary interest is Physics at the energy frontier, with the hope of one day understanding the mysteries of gravity. To push the energy frontier, I am interested also in detector and particle accelerators R&D.

Education

Ph.D Candidate, (Physics, *University of Pennsylvania, USA*), Estimated Completion 2010
B.ApSc. (Engineering Physics, *University of Toronto, Canada*), 2005

Awards

Arnold M. Denenstien Prize, 2006

– Awarded annually to a graduate student, judged by the Physics & Astronomy Department, who shows the most promise of becoming an outstanding experimental physicist.

Work Experience

Ph.D Student, University of Pennsylvania

2005 – present

- Searched for the Higgs boson in the low mass $WH \rightarrow l\nu b\bar{b}$ channel with the CDF experiment at Fermilab
- Developed a new technique (Electron pTrel) to measure the Data to MC simulation correspondence of a new b-tagger (RomaNN) for the CDF experiment at Fermilab
- Measured the synchronization of the Photoinjector Laser at the Fermilab A0 Photoinjector
- Main contributor to the development of a C++ based ILC Cavity Simulator
- Lab instructor for freshman physics classes
- Recitation section leader for freshman physics classes

Undergraduate Research Associate (thesis project), University of Toronto

2004 – 2005

- Studied the feasibility of a new undergraduate cosmic ray experiment with a Water Cerenkov detector using Geant4 simulations

Summer Research Assistant, University of Pennsylvania

summer 2004

- Developed a Time-Of-Flight circuit for Positron Emission Tomography systems

Yield Enhancement Engineering Intern, Actel Corporation

2003 – 2004

- Participated in solving yield problems

Other Skills

- Proficient in programming and using computer software.
- Demonstrated leadership skills by leading undergraduate laboratory and recitations sessions.
- Fluent in English, Cantonese and Mandarin, basic knowledge in French, Italian and Japanese.

Interests

- Photography
- Chess
- Hiking