

SNOLAB Group Summer Student Employment

APPLICATION DEADLINE: Sunday, February 19, 2012

The Particle Astrophysics (Experimental) Group at Queen's has a few openings for student research positions in summer 2012. The group is actively involved in the design, construction, and operation of next-generation experiments that seek to answer fundamental questions in particle physics and astrophysics, including searches for dark matter particles (PICASSO, DEAP, SuperCDMS), studies of solar and geo-neutrinos, and neutrinoless double-beta decay (SNO+), and investigations into advanced detector technologies. For more information about our group, see:

<http://www.sno.phy.queensu.ca/group/>

The experimental effort is being undertaken at Queen's and at the SNOLAB facility, a world-leading, ultra-low background particle astrophysics laboratory located 6800' underground in Vale's Creighton mine, near Sudbury. It is anticipated that some of the summer research activities could take place at SNOLAB. More information about SNOLAB can be found at <http://www.snolab.ca>.

Potential summer student projects include: developing particle detector simulations, studies of radiation reduction techniques for ultra-low background experiments, characterization of semiconductor and liquid argon detectors at cryogenic temperatures, development of liquid scintillator detectors and superheated droplet detectors, detector construction and assembly at SNOLAB and other similar topics. Students will gain experience in data analysis, software development, Monte Carlo simulation, laboratory measurements and hands-on hardware. The successful candidates will have strong academic records in Physics, Engineering Physics, Chemistry or a related discipline and will have had some relevant experience which demonstrates their potential for research. Students eligible for NSERC USRA or other fellowship support are encouraged to apply.

Please send a curriculum vitae and copy of recent transcript by e-mail to:

Tony Noble

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