Physics Graduate Students Headed Back to IAS Summer Program

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James Alsup and Usama Al-Binni are returning to Princeton for the second consecutive summer, this time to study "Strings and Phenomenology" at the Institute for Advanced Study (IAS) Prospects in Theoretical Physics (PiTP) summer program. Since 2002, the institute has invited 100 or so participants each year to this residential program, where they attend lectures and working sessions on the latest advances and open questions in theoretical physics.

PiTP 2008 is slated for July 14 through July 25 and lists among its organizers faculty members from Stanford, Princeton, and Caltech. Also participating will be Columbia University's Brian Greene, whose book "The Elegant Universe" has helped popularize string theory—the model proposing that every particle in the universe is made of tiny, oscillating, one-dimensional loops.

Alsup and Al-Binni are both graduate students working with Physics Professor George Siopsis, whose research delves into some of the deeper mysteries of the universe; string theory, black holes, and quantum field theoretical descriptions of cosmological evolution. That background is excellent preparation for the summer program, which is tailored this year to string theorists who want to learn about compactification (changing a theory with respect to one of its space-time dimensions) and phenomenology (calculating detailed predictions for experiments within the Standard Model, and addressing the experimental consequences of new models). Both students were also invited to last year's program, "The Standard Model and Beyond."

PiTP will be the second leg of Alsup's summer travels in physics. He is one of 500 young scientists worldwide selected for the Meeting of Nobel Laureates in Lindau, Germany. Nobel-prize winners in physics and related disciplines have been invited to the June 29-July 4 gathering, where they will give lectures and share in round table discussions with the students and postdocs chosen to attend.