## COLLOQUIUM S

## Puneet Batra Columbia University

## "Anomalies in Gauge Theories"

Monday, November 5, 2007 Talk at 4:15 – Park 328 Tea at 3:45 – Park 355, Math Lounge

## Abstract:

Conservation laws are building blocks for physical theories. Using Electromagnetism as an example, I'll review what a gauge theory is and how it leads to a conserved charge. I'll also discuss anomalies, which are violations of conservation laws due to quantum effects, and some of their physical consequences.

**BRYN MAWR COLLEGE**