



Chemical & Physical Sciences
UNIVERSITY OF TORONTO
MISSISSAUGA

COLLOQUIUM

TUESDAY, FEBRUARY 7TH, 2012
12:00 P.M. (**SHARP**) – 1:00 P.M.
CCT 2150

Bodo Bookhagen

*University of California
Santa Barbara*

“HYDROLOGIC GRADIENTS, CLIMATIC EXTREMES, AND SURFACE EROSION IN THE HIMALAYA”



The time and spatial scales of the processes resulting in decay and erosion of mountains are a matter of debate among Physical Geographers, Earth Scientists, and Geophysicist. Sediment transport from mountain areas has large implications for downstream ecosystems and population development. For example, efficiency of hydropower generation, dam-reservoir filling, and drinking-water quality are all a function of sediment concentration. One of the major difficulties in estimating and predicting sediment flux is the lack of data from low-frequency/high-magnitude events. During these events, several boundary conditions used for predicting sediment transport are difficult to estimate and may be invalid due to geomorphological process changes. During this presentation, I will highlight the impact of these hydrometeorological extreme events in the Himalaya.