Abstract Submitted for the PHY599sp06 Meeting of The American Physical Society

Sorting Category: J.10 (experimental)

Large Extra Dimensions MANAS KULKARNI¹, Stony Brook University, Stony Brook, NY — Introducing Large Extra Dimensions in the ordinary 3+1 dimensional world allow a new way of solving the Hierarchy Problem which has been bothering physicists for a long time. The consequence of a dimensionally rich space-time would be profound and would help us in bridging and understanding the energy gap region between the three forces under Standard Model and Gravitational Force. We will study various experimental results such as Collider Experiments, Gravity Experiments and Cosmological Experiments. We will report on the results from searches for Extra-Dimensions at two tevatron experiments CDF and $D\Phi$. There is no evidence yet on the existence of Large Extra-Dimensions but physicists can still expect that there may be an exciting discovery soon. Unfortunately Extra-Dimensions cannot be probed in any existing or foreseen experiments as resolutions necessary to penetrate such small distances would require energy beyond the range spanned by either natural or man-made beams.

¹Spring 2006 PHY599



Prefer Oral Session Prefer Poster Session

Date submitted: February 16, 2006

Manas Kulkarni @grad.physics.sunysb.edu Stony Brook University

Electronic form version 1.4