Abstract Submitted for the IT05 Meeting of USB Dept. of Physics and Astronomy

Sorting Category: 1.0 (T/E)

Proton Decay MICHAEL DELOS, Stony Brook University — The stability of the proton, along with the larger concept of baryon number conservation, has long been a tenet of particle physics. No proton decay event has ever been observed. However, many attempts to advance beyond the Standard Model are now predicting that the proton can decay. The Kamiokande/Super-Kamiokande observatory was established to monitor for such decay events and its ongoing observation is imposing ever more stringent lower bounds on the lifetime of the proton. In this talk I will discuss why many GUTs predict proton decay. I will then give an overview of the Super-Kamiokande's search for proton decay and present its results to date.

X	Prefer Oral Session
	Prefer Poster Session

Date submitted: 15 Nov 2010

Electronic form version 1.4

michael.delos@gmail.com Stony Brook University

Michael Delos