

11th VIENNA CENTRAL EUROPEAN SEMINAR ON PARTICLE PHYSICS AND QUANTUM FIELD THEORY

Venue: Faculty of Physics, University of Vienna, Ernst-Mach-Hörsaal, Boltzmanngasse 5, 1090 Wien

PUBLIC TALK

November 27, 2015; 18:15

Soo-Jong REY

Seoul National University & Institute For Basic Science "MEMORABLE EVENTS IN FIELDS, GRAVITY AND STRINGS"

Abstract:

100 years after Einstein's discovery of General Relativity the field provides an abundance of novel research directions. In this colloquium we focus on a specific one, gravitational memory, and related effects in fields and strings.

"Registering events are in general difficult for radio waves, exceedingly difficult for gravity, and deemed impossible for strings. I present elementary and intuitive arguments for how such event memory can be registered in a simple manner by utilizing SQUID for radio waves, Dyson's balloon for gravity and D-branes for string. I then relate such memory effects to so-called Weinberg's low-energy theorems and to novel (asymptotic) symmetry charges."



VIENNA PARTICLE PHYSICS





