# SCGP Weekly Talk

Tuesday, September 20•1:15 – 2:15pm

Speaker: Ibrahima Bah

Title: Symmetry structure from the bulk and holography

Abstract: Recently there has been a revival in the study of symmetries of physical systems due to the novel perspective that symmetries characterize topological aspects of quantum mechanical systems. Significant efforts by many researchers from condensed matter physics, to high energy physics and mathematics have been devoted to fully exploring the consequences of this perspective in physics. An important aspect to this is the understanding that symmetries, and their associated structures in a given quantum system, can be characterized in one dimension higher by a topological field theory via inflow mechanics. Such descriptions can naturally emerge whenever we can construct quantum field theories from decoupling limits of string theory or supergravity. In this talks I will review recent progress in these endeavors and discuss the critical questions that we hope to address.