SPEAKER: Erik Plauschinn

TITLE: **The tadpole conjecture in asymptotic limits**

DATE: 27 Apr 2022, 15:00

PLACE:

ABSTRACT

Superstring theory is defined in ten space-time dimensions. In order to connect it to physics in four dimensions one typically has to compactify the theory and satisfy a number consistency conditions. One of them is the tadpole cancellation condition. However, recently Bena, Blabäck, Grana and Lüst made a "tadpole conjecture" which - if true - would imply that many naively-allowed (flux-)compactifications are inconsistent. In the first part of the talk I will explain and illustrate the tadpole conjecture. In the second part I present arguments towards a proof of the conjecture in asymptotic limits using the framework of asymptotic Hodge theory.

Organized by

INFN & DFA Dr. S. MASSAI