XV AVOGADRO MEETING on Strings, Supergravity and Gauge Theories



Contribution ID: 23

Type: Gong Show/Poster

3d S-Fold SCFTs and Supersymmetry enhancement

Thursday, 19 December 2019 09:30 (7 minutes)

A large class of 3d SCFTs can be engineered inserting a local SL(2,Z) duality wall into the Type IIB brane system leading to the so called S-fold SCFTs. These theories are intrinsically non Lagrangian, due to the gauging of the global symmetries of a T(U(N)) SCFT, thus playing the role of non-conventional matter. In this talk I will discuss the main features of S-fold SCFTs, focusing on their moduli space and how mirror symmetry relates them. The construction of these theories can be extended to various gauge groups, and in particular I will discuss the ones involving G_2 gauge group. Moreover, the issue of the amount of supersymmetry these theories possess in the IR will be addressed employing the computation of the supersymmetric index. In the end I will also mention some aspects of theories arising on the S-duality wall of $4d \mathcal{N} = 2 SU(N)$ gauge theory with 2N flavours.

Primary author:GAROZZO, Ivan (Bicocca)Presenter:GAROZZO, Ivan (Bicocca)Session Classification:Gong Show/Poster