Séminaire de matrices, cordes et géométries aléatoires

Mercredi 20/11/2019, 14:15-15:15

Orme des Merisiers Salle Claude Itzykson, Bât. 774

T-branes and supersymmetry enhancement

Simone Giacomelli

Oxford

T-branes are exotic bound states of D-branes, characterized by mutually non-commuting vacuum expectation values for the worldvolume scalars. The M/F-theory geometry lifting D6/D7-brane configurations is blind to the T-brane data. In this talk I will first explain how we can make this data manifest, by probing the geometry with an M2-brane and then I will consider an application of T-branes in the context of F-theory, showing that we can use them to understand the phenomenon of supersymmetry enhancement along the RG flow of four dimensional field theories, recently observed by Maruyoshi and Song.