

\*\*\* Miguel Montero

Title: Reflections on 7-branes

Abstract: The principle of absence of global symmetries in quantum gravity can be used to predict the existence of new objects in a theory, which break all global symmetries. I will describe how this can be applied to type IIB string theory in one particular case, concluding the existence of a "reflection 7-brane", which is non-supersymmetric. I will describe what we know about the construction, worldvolume theory, stability, duality properties, and provide independent holographic evidence for its existence as the brane that implements charge conjugation in the  $(2,0)$  SCFT's.