Aspects of 4d N=2 theories and BPS-quivers

BPS-quivers are quivers for certain special supersymmetric quantum mechanical systems with 4 conserved supercharges. Such supersymmetric quantum mechanical systems characterize the infrared dynamics of systems of D3 branes wrapped on intersecting special lagrangian 3-cycles inside local Calabi-Yau 3-folds engineering 4D N=2 systems in IIB superstrings. In this talk, Dr. Del Zotto will discuss some aspects of the physics of 4D N=2 quantum field theories which are more easily characterized in the framework of BPS-quivers, and in certain cases have been discovered thanks to it. Based on joint works with Sergio Cecotti, and Ashoke Sen.