

## S-folds, String Junctions, and 4D $N=2$ SCFTs

*Monday, 22 March 2021 15:00 (1 hour)*

In this talk I will discuss  $N=2$  SCFTs realised on the worldvolume of D3-branes probing an S-fold plane with 7-branes. I will show how to formulate a projection on string junctions ending on 7-branes that generalises the usual orientifold projection of perturbative string theory to the case of S-fold planes. Using this technique it is possible to read off the flavour symmetry of the SCFT for all possible S-fold planes including the cases with discrete torsion. As a byproduct of this analysis it is possible to understand which representations of the flavour symmetry group are allowed. Finally, I will discuss the computation of central charges of these theories and discuss how to define F-theory in the presence of S-folds with discrete torsion.

**Presenter:** Dr ZOCCARATO, Gianluca (UPenn)

**Session Classification:** Tor Vergata String Seminars