

Non-supersymmetric D-branes

Tuesday, 25 June 2019 12:00 (30 minutes)

I will argue that D-branes provide an interesting ingredient for constructing and understanding non-supersymmetric string theory compactifications. D-branes break supersymmetry spontaneously. This can lead to setups with non-linearly realized supersymmetry. This non-linear symmetry is still constraining the action, can be sufficient to derive renormalization theorems and therefore gives substantial control over the string compactification. I will correct a misconception in the literature about SUSY breaking intersecting D-branes. Then I discuss flux compactifications with non-supersymmetric D-branes that provide an interesting testing ground for the recent dS swampland conjecture.

Presenter: WRASE, Timm Michael (Vienna University of Technology)