ID de Contribution: **112** Type: **Non spécifié**

Metastable antibranes

Despite their consequential applications, certain aspects of metastable antibranes in warped throats are not yet fully understood. In this talk, I will introduce the Kachru-Pearson-Verlinde (KPV) state, a frequently-discussed exemplar metastable antibranes configuration, and briefly recap the decade-long discussions on its existence. I will present a perturbative supergravity solution that captures the backreaction of these metastable antibranes. This perturbative description is obtained via matched asymptotic expansion and approximates the metastable state when there is a large separation of scale, i.e. when the length scale associated to the branes is much smaller than the length scale associated to the background/bending. I'll discuss how this perturbative solution, taken in conjunction with previous results, serves as strong evidence in the discussion on the existence of the KPV state. If time permits, I will also introduce discussions on classical stability and discuss how our results can provide insights there.

This talk is based on a recent work with Vasilis Niarchos [2112.04514]. It is also greatly influenced by previous works [1812.01067] (PRL), [1904.13283] (JHEP), and [1912.04646] (JHEP) with Jay Armas, Vasilis Niarchos, Niels Obers, and Thomas Van Riet.

Type of contribution

Contributed Talk or Poster

Author: NGUYEN, Nam Huy

Orateur: NGUYEN, Nam Huy

Classification de Session: Posters

Classification de thématique: Posters