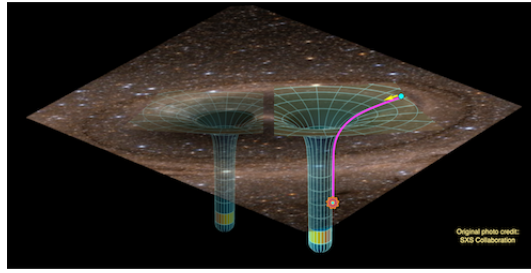


BLACK-HOLE MICROSTRUCTURE



ID de Contribution: 13

Type: Non spécifié

Bubble Bag End: a Non-BPS Floating Brane's Tale

jeudi 10 juin 2021 16:30 (1 heure)

Using the Weyl formalism, we will describe a new mechanism for constructing smooth bubbling geometries in the non-BPS regime. The solutions require at least 6 dimensions, they are static, axially symmetric and asymptotic to four-dimensional Minkowski flat dimensions plus extra compact dimensions. They are generated by a set of harmonic functions like their BPS cousins but are sourced by rods. We will study solutions consisting of a large number of smooth microscopic bubbles, so-called Bubble Bag Ends. These solutions resemble a geometry with a naked singularity that is resolved by the chain of bubbles. The S^2 sphere suddenly opens in the vicinity of the singularity but closes at the bubble loci where the space-time caps off smoothly. We will embed the solutions in string theory and discuss a new non-BPS floating brane Ansatz that allows the construction of static horizonless bubbling geometries.

<https://youtu.be/CpjWvOLVkoo>

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