

## Contributed Talk

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**Title:** Multipole Moments of Fuzzballs

**Abstract:** Some of the deep conceptual problems associated with classical black holes can be addressed in string theory according to the "fuzzball" paradigm. Within this approach, a black hole can have a microscopic description in terms of regular and horizonless, microstate geometries. In this talk we discuss the multipolar structure of these microstate geometries and we will show that it can be much richer and less symmetric than the corresponding classical black hole structure. The analysis here discussed is particularly relevant in the context of measuring multipole moments of dark ultracompact objects and of observational tests to distinguish fuzzballs from classical black holes.