

1137-53-151 **Po-Ning Chen***, poningc@ucr.edu. *Quasi-local energy in general relativity.*

In this talk, we will introduce a newly defined quasi-local energy for spacetimes with a non-zero cosmological constant using the Hamilton-Jacobi approach with the de-Sitter or the anti de-Sitter space as the reference space. We will describe the properties of the new quasi-local energy and compare them with earlier results on quasi-local energy without a cosmological constant.

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