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Po-Ning Chen*, poningc@ucr.edu. *Quasi-local mass at the null infinity of the Vaidya spacetime.*

There are two important statements regarding the Trautman-Bondi mass at null infinity: one is the positivity, and the other is the Bondi mass loss formula. Both are both global in nature. The positivity of the quasi-local mass can potentially lead to a local description at null infinity. This is confirmed for the Vaidya spacetime. In this talk, we discuss how to evaluate the Wang-Yau quasi-local mass on surfaces of fixed size at the null infinity of the Vaidya spacetime. The optimal embedding equation is solved explicitly and the quasi-local mass is evaluated in terms of the mass aspect function of the Vaidya spacetime.

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