

1116-53-1134 **Jeffrey L Jauregui*** (jaureguj@union.edu). *Lower semicontinuity of the ADM mass.*

In general relativity a number of problems involve taking a limit (in some topology) of a sequence of asymptotically flat manifolds of nonnegative scalar curvature. It is of both geometric and physical interest to determine how the ADM (total) mass of such spaces behaves when passing to the limit. After giving several examples, I will discuss the main results on proving that the mass cannot increase in the limit, first for C^2 convergence and then, in joint work with Dan Lee, for merely C^0 convergence. (Received September 17, 2015)