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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 ADM cannot increase in the limit, for some natural choices of topology. (Received September 09, 2014)