1135-53-142Brian Allen* (brian.allen@usma.edu). IMCF and the Stability of the PMT and RPI.We will discuss the stability, under L^2 metric convergence, of the Positive Mass Theorem (PMT) and the RiemannianPenrose Inequality (RPI) in the case where a region of an asymptotically flat manifold M^3 can be foliated by a smoothsolution of Inverse Mean Curvature Flow (IMCF) which is uniformly controlled. (Received August 03, 2017)