1126-58-48   **Christina Sormani*** (`sormanic@gmail.com`), New York, NY 10016. *Scalar Curvature and Intrinsic Flat Convergence.*

While Gromov proved sequences of manifolds with nonnegative Ricci curvature have subsequences converging with respect to his intrinsic Hausdorff convergence, Ilmanen's famous example demonstrates no such theorem holds for sequences of manifolds with nonnegative scalar curvature. In joint work with Wenger, the intrinsic flat distance was introduced applying techniques of Ambrosio-Kirchheim, and was shown to produce a limit for Ilmanen's Example. I will survey conjectures of Gromov and Lee-Sormani and results of Basilio, Huang, Jauregui, Lang, Lakzian, Lee, LeFloch, Matveev, Munn, Perales, Portegies, Sinaei, Sormani, Stavrov and Wenger. See https://sites.google.com/site/intrinsicflatconvergence/ for links to all papers. There are many open questions in this area. (Received December 18, 2016)