Meeting: 998, Houston, Texas, SS 15A, Special Session on Geometric Variational Problems

998-53-336 Neshan Wickramasekera* (neshan@math.mit.edu), Department of Mathematics, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139. Singularities of immersed stable minimal hypersurfaces. Preliminary report.

We present some recent results concerning the size and the nature of the set of singularities of a hypersurface arising as the weak limit of a sequence of immersed, stable, minimal hypersurfaces of arbitrary dimension. These results will in particular include low dimensionality of the set of points where no tangent cone is entirely a union of hyperplanes, and the asymptotic behavior of the hypersurface near a point with a tangent cone equal to a pair of hyperplanes. (Received March 01, 2004)