1038-49-146 Soomin Kim\* (kim64@math.purdue.edu), Department of Mathematics, Purdue University, 150 N. University Street, West Lafayette, IN 47907. Limits of Minimal Surfaces with Increasing Genus.

My research is devoted to classification of minimal surfaces. We prove that the family E(n) of minimal surfaces with genus n and one Enneper-type end, indexed by increasing genus, has a limit, and further, that the limit is nearly the classical Scherk surface. This is the first nontrivial example of a limit being taken of a family of minimal surfaces of increasing topological complexity. (Received February 05, 2008)