

Meeting: 1001, Evanston, Illinois, SS 7A, Special Session on Geometric Partial Differential Equations

1001-51-165 **Nicola Garofalo*** (garofalo@math.purdue.edu), Department of Mathematics, Purdue University (and Università di Padova), West Lafayette, IN 47907, and **Scott Pauls** (scott.pauls@dartmouth.edu), Department of Mathematics, Dartmouth College, Hanover, NH 03755-3551. *The Bernstein problem in the Heisenberg group.*

The classical Bernstein problem states that a smooth entire minimal graph in Euclidean space must be a plane. We discuss a related version of the Bernstein problem in the first Heisenberg group and present a complete solution of the latter. We also provide a counterexample to a conjecture stating that an entire minimal graph with empty characteristic locus must be a vertical plane $ax + by = c$. (Received August 24, 2004)