Meeting: 1006, Lubbock, Texas, SS 6A, Special Session on Real Algebraic Geometry

1006-14-136 David A. Weinberg* (weinberg@math.ttu.edu), Texas Tech University, Department of Mathematics and Statistics, Lubbock, TX 79409-1042, and Nicholas J. Willis (nicholas.j.willis@ttu.edu), Texas Tech University, Department of Mathematics and Statistics, Lubbock, TX 79409-1042. Singular Points of Real Quintic Curves. Preliminary report.

The classification of individual types of singular points for real quintic curves will be discussed. The classification is based on taking just enough of the Puiseux expansion to separate the "branches". The computer algebra program Maple is extensively used to do the symbolic computations in the proof. (Received February 11, 2005)