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John Maharry* (maharry@math.ohio-state.edu), Dept. of Mathematics, The Ohio State University, Columbus, OH , and **Daniel Slilaty** (slilaty@math.wright.edu), Dept. of Mathematics, Wright State University, Dayton, OH. *Projective-Planar Graphs with no $K_{3,4}$ -minor.*

There are known exact excluded-minor characterizations of several small graphs, including K_5 , $K_{3,3}$, V_8 , Q_3 and C_7^2 . Such characterizations for K_6 or the Petersen Graph would help to settle many conjectures, but seem out of reach at present. In this talk, we will present a characterization of $K_{3,4}$ -Free graphs on the Projective plane. The maximal such graphs are generated by four operations on designated 'patches' of the embedding. Further, we will discuss progress in the non-Projective planar case, based the list of 35 minor-minimal non-projective planar graphs. (Received September 03, 2009)