1037-05-69   **Alexandra Ovetsky Fradkin*** (`aovetsky@math.princeton.edu`), Princeton University, Department of Mathematics, Fine Hall, Washington Road, Princeton, NJ 08540. *Hadwiger's conjecture for quasi-line graphs.*

Hadwiger's conjecture states that if a graph is not t-colorable then it contains the complete graph on t+1 vertices as a minor. The case t=4 is equivalent to the four color theorem and the case t=5 was proved by Robertson, Seymour, and Thomas with the use of the four color theorem. For t>5, the conjecture remains open. Reed and Seymour have also proved that Hadwiger's conjecture holds for line graphs.

A graph is a quasi-line graph if the neighbor set of every vertex is the union of two cliques. The class of quasi-line graphs is a proper superset of the class of line graphs. In a joint work with Maria Chudnovsky, we proved that Hadwiger's conjecture holds for quasi-line graphs, thus extending the result of Reed and Seymour. We used a structure theorem for quasi-line graphs from a recent work of Chudnovsky and Seymour. (Received January 22, 2008)