

1087-05-80

**Mark Ellingham\*** ([mark.ellingham@vanderbilt.edu](mailto:mark.ellingham@vanderbilt.edu)), **Emily Marshall**, **Kenta Ozeki** and **Shoichi Tsuchiya**. *Hamiltonicity of 3-connected planar graphs with a forbidden minor*. Preliminary report.

Tutte showed in 1956 that all 4-connected planar graphs are hamiltonian. But examples of 3-connected planar graphs (or even more specifically, triangulations) that are not hamiltonian have been known since at least the 1930s. So we may ask what additional conditions can be imposed on 3-connected planar graphs to make them hamiltonian. We show that  $K_{2,5}$ -minor-free 3-connected planar graphs are hamiltonian. (Received November 28, 2012)