1126-35-73   **Virgil U Pierce*** (`virgil.pierce@utrgv.edu`). *Enumeration of Mobius Graphs.* Preliminary report.

The partition function of N-by-N symmetric random matrices has a natural interpretation in terms of a tau-function for the Pfaff lattice hierarchy. The asymptotic expansion of the log-partition function gives generating functions for the enumeration of maps indexed by genus, and the parameters of the deformation index the maps by the valency of their vertices. The Pfaff lattice hierarchy then gives a hierarchy of governing equations that in principle determine the terms in the asymptotic expansion. (Received January 02, 2017)