1030-05-299   **Jay Schweig*** (`schweig@math.cornell.edu`), Mathematics Department, Malott Hall, Cornell University, Ithaca, NY 14853. *The h-vector of a Lattice Path Matroid.* Preliminary report.

Lattice path matroids are matroids whose bases can be associated with a certain set of lattice paths in the plane. Stanley has conjectured that the h-vector of a matroid is a pure M-vector, and we prove this in the special case of lattice path matroids. We also mention an interesting property that results from our proof, and discuss possible further directions. No knowledge of h-vectors or matroids (lattice path or otherwise) will be assumed. (Received August 06, 2007)