1047-11-187   **Darrin M. Doud*** (`doud@math.byu.edu`), Department of Mathematics, Brigham Young
University, Provo, UT 84602. *LLL reduction and a conjecture of Gunnells.*

Paul Gunnells has developed an algorithm for computing actions of Hecke operators on arithmetic cohomology below
the cohomological dimension. His algorithm relies on a conjecture concerning LLL-reduced matrices. We prove this
conjecture for dimensions 2 through 5, and disprove it for all higher dimensions. (Received January 28, 2009)