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Paul Garrett* (garrett@math.umn.edu), 127 Vincent Hall, 206 Church St. SE, School of Mathematics, Univ of MN, Minneapolis, MN 55455. *Self-adjoint operators on spaces of automorphic forms.*

Compact periods of Eisenstein series extend Y. Colin de Verdiere's example of a self-adjoint operator on automorphic forms whose discrete spectrum, if any, is parametrized by zeros of a zeta function. We show that pair-correlation for zeros of Euler products give the negative result: at most a limited fraction of on-line zeros s can appear as eigenvalues $s(s-1)$ for corresponding pseudo-Laplacians, contrary to a speculation of Colin de Verdiere. However, this sparsity may facilitate a subtler approach to the situation. Part of ongoing work with E. Bombieri. (Received July 24, 2014)