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Testing the spin-cutoff factor in shell-model level densities¹ WILLIAM SPINELLA, CALVIN JOHNSON, San Diego State University — The spin-cutoff factor is a standard parameterization for the angular momentum dependence of the nuclear level density. We test how good it is by diagonalizing shell-model Hamiltonians for a variety of sd- and pf-shell nuclides and looking at excited states up to 10 MeV. In general we find it is a very good approximation.

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