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An interactive website for the nuclear shell model: Concordia¹ DAVID MORRIS, ALEXANDER VOLYA, Department of Physics, Florida State University — The nuclear shell model has become a standard theoretical approach to study nuclear many body systems. Shell model calculations using well-established interactions provide a powerful tool for nuclear experiments. Although some shell model results are tabulated, on demand calculations are increasingly important. In order to facilitate extensive calculations, result storage, and analysis, we have developed a web-based interactive interface² for the shell model code CoSMo.³ The web portal allows calculation of nuclear levels with a number of interactions and valence spaces. It also permits analysis of occupation numbers, spectroscopic factors, and electromagnetic transition rates.

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²http://cosmo.volya.net

³A. Volya, Applications of Continuum Shell Model, in Opportunities with exotic beams (WorldScientific, Singapore, 2007), p. 132; http://arxiv.org/abs/nucl-th/0605034

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