

Abstract Submitted
for the DAMOP08 Meeting of
The American Physical Society

Long-Range Wells in Rydberg-Rydberg Potential Curves NOLAN SAMBOY, JOVICA STANOJEVIC, ROBIN CÔTÉ, University of Connecticut — We explore the interaction of Rydberg atom pairs including dipole, quadrupole, and spin-orbit couplings. We find that some of the resulting potential curves exhibit wells deep enough to support many bound states. We investigate the properties of these wells as well as the influence that small electric fields may have on the potential curves.

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Date submitted: 01 Feb 2008

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