Abstract Submitted
for the APR07 Meeting of
The American Physical Society

Calculation of three-body resonances using slow-variable discretization coupled with complex absorbing potential[1] JUAN BLANDON, VIATCHESLAV KOKOOULINE, University of Central Florida, Orlando, Florida , FRANCOISE MASNOU-SEEUWS, Laboratoire Aime Cotton, Paris, France — We developed a method to calculate positions and widths of three-body resonances. The method combines the hyperspherical adiabatic approach, slow variable discretization method (Tolstikhin et al., J. Phys. B: At. Mol. Opt. Phys. 29, L389 (1996)), and a complex absorbing potential. The method can be used to obtain resonances having short-range or long-range wave functions. In particular, we applied the method to obtain very shallow three-body Efimov resonances for a model system (Nielsen et al., Phys. Rev. A 66, 012705 (2002)).

[1]Research made possible thanks to the donors of the American Chemical Society Petroleum Research Fund, the NSF under Grant No. PHY-0427460 (project # PHY-040022), and the FEF through the McKnight Doctoral Fellowship.

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Date submitted: 03 Jan 2007 Electronic form version 1.4