

Abstract Submitted
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Stabilization of Autoionizing States in Crossed Magnetic and Electric Fields¹ KATARZYNA KRAJEWSKA, University of Nebraska-Lincoln, USA, and Institute of Theoretical Physics, University of Warsaw, Poland, JERZY Z. KAMIŃSKI, Institute of Theoretical Physics, University of Warsaw, Poland — We demonstrate by numerical analysis of a zero-range potential model describing a negative ion in crossed magnetic and electric fields the existence of autoionizing states. We observe that with the increasing electric-field strength the lifetime of those states increases, reaches its maximum value, and then starts decreasing rapidly. Such a stabilization has been observed before for the so-called electric-field-induced resonances [1] but, to our knowledge, has never been recognized for autoionizing states. [1] K. Krajewska and J. Z. Kamiński, *Phys. Lett. A* **301**, 369 (2002).

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