

Abstract Submitted
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Progress toward probing the electron electric dipole moment using the PbF molecule: The lifetime of the D state of PbF POOPALASINGAM SIVAKUMAR, CHRISTOPHER MCRAVEN, NEIL SHAFER-RAY, The University of Oklahoma — The lead fluoride molecule has many features that may prove advantageous to a measurement of the electron's electric dipole moment (the e-edm.) Among these features is a X-A-D doubly resonant enhanced multi photon ionization process that allows for pseudo-continuous state selective detection. Critical to the design of a laser system to take full advantage of this detection scheme is the lifetime of the D state. We report an experimental value for this lifetime and discuss its implication for future measurements of the e-edm.

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