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A continuous molecular beam source of lead monofluoride P. SIVAKUMAR, C.P. MCRAVEN, N.E. SHAFER-RAY, University of Oklahoma — Due to its insensitivity to background magnetic fields combined with large internal electric fields, the ground-state of lead monofluoride (PbF) may be uniquely sensitive to an electron electric dipole moment (PRA, 73, 034102, 2006). The serendipitous discovery of MgF2 and Pb yielding PbF has enabled us to build a reliable continuous molecular beam source of lead monofluoride. Details of the source and detection of the molecule are presented.

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