

Abstract Submitted
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Plans to build a VMOT at BSU ED DEVENEY, Bridgewater State University — The seminal paper for the undergraduate MOT appeared in AJP in 1995 by C. Wieman and G. Flowers; “Inexpensive laser cooling and trapping experiment for undergraduate laboratories.” Here they write: “Because of this visual appeal and the current research excitement in this area, we felt that it was highly desirable to develop an atom trapping apparatus that could be incorporated into the undergraduate laboratory classes.” In collaboration with colleagues at Yale (Dave DeMille and his group) we present a design for a Visible, Li, MOT (VMOT) to be built in the future here at BSU. The VMOT design incorporates significant simplifications and straightforward techniques to make this undergraduate experiment more “do-able.” Moreover, because the VMOT is in the visible we argue that the clarity, ease and educational impact of the experiment are significantly enhanced.

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