

Abstract Submitted  
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**Progress on lattice light shift evaluations in the JILA 1D strontium optical lattice clock** TOBIAS BOTHWELL, COLIN KENNEDY, JOHN ROBINSON, ERIC OELKER, JOSEPHINE MEYER, WILLIAM MILNER, DHRUV KEDAR, JILA/CU, JUN YE, JILA/CU/NIST — We have rebuilt the JILA Sr1 optical lattice clock including an intra-vacuum build-up optical cavity for a 1D lattice. The system is designed for robust operation to support an all-optical time scale, and to advance the state-of the-art in lattice clock performance. The design goals include clock stability better than  $3 \times 10^{-17}$  at 1 s, and clock uncertainty better than  $1 \times 10^{-18}$ . In this talk we will report on our progress evaluating lattice light shifts in this system and will discuss our work on reporting the necessary atomic coefficients for improved accuracy.

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