Abstract Submitted
for the DAMOP14 Meeting of
The American Physical Society

Progress Towards a Compact Optical Clock at JPL[1] SCOTT SULLIVAN, WADE RELLERGERT, IVAN GRUDININ, LUKAS BAUMGARTEL, NAN YU, Jet Propulsion Laboratory, California Institute of Technology — The unprecedented stability and accuracy provided by optical clocks allows improved navigation and planetary science in space applications as well as more precise tests of fundamental laws of physics. However, technological advances towards the miniaturization of the physical volume and reduced power consumption of these clocks must be made to suit space-based application. We will describe JPL's effort towards the development of a compact, low-power optical clock based on $^{171}Yb^{+}$.

[1]This research was carried out at the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration. Partial support from NASA Fundamental Physics Program is acknowledged.

Scott Sullivan
Jet Propulsion Laboratory, California Institute of Technology

Date submitted: 31 Jan 2014 Electronic form version 1.4