Abstract Submitted
for the APR09 Meeting of
The American Physical Society

The Cosmic Origins Spectrograph: Design, Preflight Performance and Science Goals STEVEN OSTERMAN, JAMES GREEN, CYNTHIA FRONING, STEVEN PENTON, STEPHENE BELAND, MICHAEL SHULL, Center for Astrophysics and Space Astronomy, University of Colorado, Boulder, ALESSANDRA ALOISI, CHARLES KEYES, Space Telescope Science Institute, DAVID SAHNOW, Department of Physics and Astronomy, Johns Hopkins University, JASON MCPHATE, Space Sciences Laboratory, University of California, Berkeley — The Cosmic Origins Spectrograph (COS) is a new ultraviolet spectrograph which will be installed into the Hubble Space Telescope (HST) as part of the upcoming Servicing Mission 4. COS will be the most sensitive ultraviolet spectrograph ever flown aboard HST, and is optimized for observing faint, point source targets at low and moderate spectral resolutions (R$\sim$ 1500-3500 and 16,000-20,000) at wavelengths ranging from 115 nm to 320 nm. The principal scientific objectives of the mission include the study of the origins of large-scale structures in the universe, the formation and evolution of galaxies, the origin of stellar and planetary systems and the cold interstellar medium. We will present the instrument design, preflight performance, projected on-orbit capabilities, and the key scientific objectives of the mission.

Steven Osterman
Center for Astrophysics and Space Astronomy,
University of Colorado, Boulder

Date submitted: 23 Mar 2009 Electronic form version 1.4