The Orbiting Wide-angle Light collectors (OWL) Mission

John Krizmanic\textsuperscript{1} & John Mitchell\textsuperscript{2} for the OWL Collaboration
\textsuperscript{1}CRESST/USRA/NASA/GSFC Code 661, Greenbelt, MD 20771 USA
\textsuperscript{2}GSFC Code 661, Greenbelt, MD 20771 USA

The Orbiting Wide-angle Light collectors (OWL) experiment is a future space-based mission that has been extensively studied. OWL employs the air fluorescence technique to stereoscopically image the air showers induced by ultra-high energy cosmic rays and neutrinos. Two satellites, each with a large Schmitt telescope, image the ultra-violet signal from the air fluorescence when over the dark, night-side sky. The physics potential of the current mission design will be presented along with potential improvements in performance.