

**Venus In Situ Atmospheric and Geochemical Explorer (VISAGE): A Proposed New Frontiers Mission.** L. W. Esposito<sup>1</sup>, <sup>1</sup>LASP, University of Colorado. 3665 Discovery Drive, Boulder CO 80303-7820, Larry.Esposito@LASP.Colorado.EDU

**Introduction:** VISAGE is a Venus lander mission that performs **atmospheric** and **surface** science investigations. The carrier spacecraft flies by the planet and serves as the telecom relay. VISAGE has a short landed mission duration (a few hours), with no ground control.

**Surface activities:** On the surface, VISAGE measures the mineralogy and elemental composition **at two depths**. The samples are brought inside for analysis. Pictures of the drill sites before and after provide more context and compositional information.

**Science investigations:** Noble gas and light stable isotopes inventory; Trace and reactive gas composition from surface to clouds; Descent imaging of the surface below 15 km; Atmospheric structure profile; Elemental and mineralogical composition of surface rocks; Panoramic images of the landing site.

**Noble gases** decide between models of Venus origin;

**Composition** of the Venus surface tells its history.

**Science drivers:** to compare Earth, Mars, Venus; predict the future of Earth; develop models for extra-solar planets.

