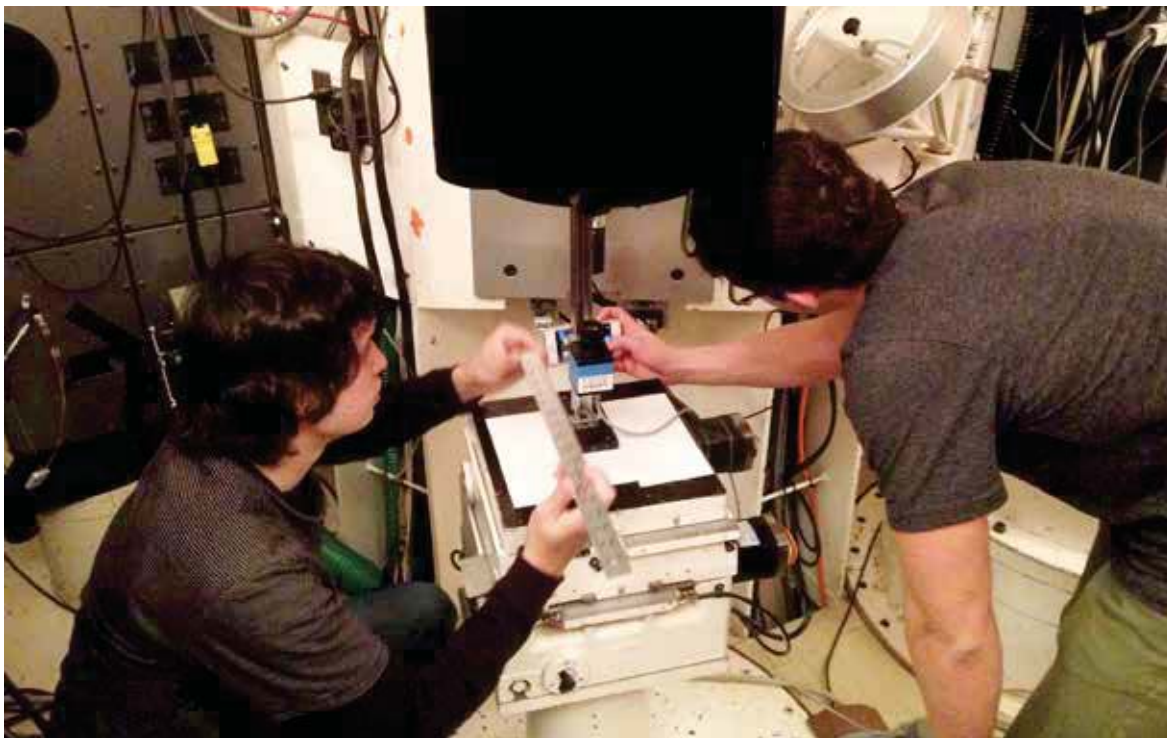


Jovian Interiors from Velocimetry Experiment in New Mexico (JIVE in NM)

New Mexico State University/NASA Ames Research Center, Jet Propulsion Laboratory, Goddard Space Flight Center, Science Mission Directorate



Testing of new guiding camera at the Dunn Solar Telescope at Sunspot, NM. Pictured are NMSU engineering students Christopher Trujillo and Samuel Horst measuring the focal plane of the telescope. Photo credit: Ethan Dederick.

Jupiter is the most massive planet, representing 70 percent of the mass in the solar system apart from the Sun, yet still presents many mysteries about its structure. New Mexico State University is leading an international team of researchers in the “Jovian Interiors from Velocimetry Experiment (JIVE) in New Mexico,” a ground-based instrument and part of a global network that will decisively measure oscillations on Jupiter for the first time. Its results will help us understand the interior structure and composition of the planet and the solar systems formation.

A key component of this project is the use of a proper telescope. The JIVE team has done feasibility studies and has decided to use the large Dunn Solar Telescope, located at Sacramento Peak, NM and operated by the National Solar Observatory. The use of a “daytime” telescope for nighttime observations of Jupiter will be very unique. One of the key aspects currently being tested is how well the telescope will be able to “track” Jupiter to keep it in view over the course of a night, since it’s much smaller than the Sun. The photo shows testing being carried out in early 2016 by NMSU students and faculty. ✨



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<http://astronomy.nmsu.edu/JIVE/> - JIVE homepage

https://www-n.oca.eu/jovial2016/Kick-off_Avril2016/index.html

JOVIAL kickoff meeting (2016) website with information on the JOVIAL project