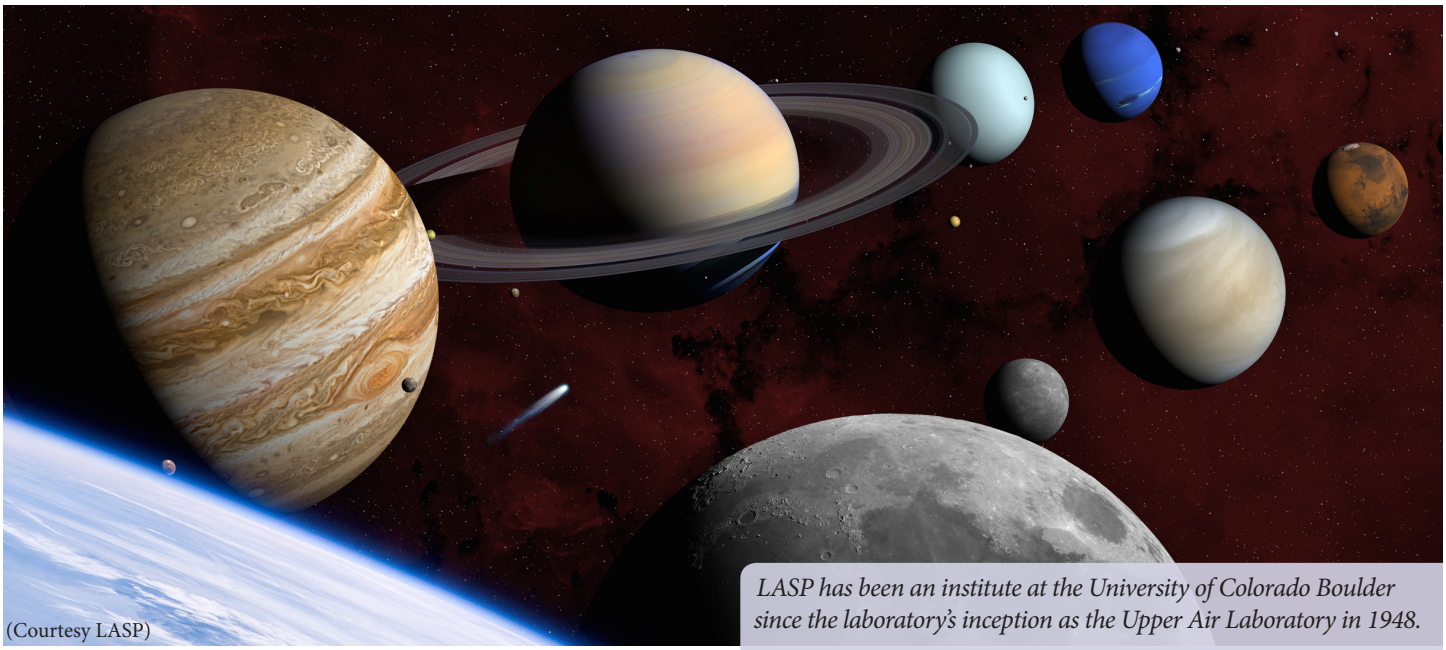
Current Accomplishments

Spring 2019

Laboratory for Atmospheric and Space Physics
University of Colorado **Boulder**



(Courtesy LASP)

LASP has been an institute at the University of Colorado Boulder since the laboratory's inception as the Upper Air Laboratory in 1948.

The Laboratory for Atmospheric and Space Physics (LASP) is a full-cycle space research institute, combining all aspects of space exploration through our expertise in science, engineering, mission operations, data management, and education. The laboratory is a leader in atmospheric and space research, focusing on planetary science, solar terrestrial physics, atmospheric sciences, and space physics.

Science drives exploration

LASP scientists develop areas of focus for space, aircraft, and high-altitude balloon missions; our researchers define the technology required to collect data and answer scientific questions. LASP is currently involved in twenty-two missions already in space and fourteen others that are under development.

Engineering supports scientific endeavors

LASP has the in-house engineering capabilities and facilities to support the design and manufacture of space-based and suborbital instruments and small to Discovery-class spacecraft for LASP and partner institutions. LASP has developed scientific instrumentation for dozens of deep-space and Earth-orbiting spacecraft missions, 200 sub-orbital rocket flights, and more than 20 airborne experiments.

Mission Ops retrieves, processes, and delivers data

LASP mission operators, software engineers, and data systems experts manage the day-to-day mission and science operations for spacecraft and instruments. In addition, LASP is responsible for the delivery of scientific data to scientists and the public, continuing the cycle of space exploration. LASP currently operates four NASA satellites and more than 140 space science instruments.

Quick Facts

Research awards: $114M in FY 2018
Employees: 435 professionals and 145 students
Current missions: MAVEN—Mars; AIM—Upper Atmosphere; SORCE—Sun-Earth
LASP has built 35 instruments for 18 operating missions:
CSIM, MinXSS-2, Parker Solar Probe, GOES-16 & 17, GOLD, TSIS-1, MMS, MAVEN, STPSat-3, Van Allen Probes, SDO, New Horizons, AIM, SORCE, THEMIS, TIMED, Voyager
LASP is developing 15 instruments for 13 missions:
NASA: TSIS-2, Europa Clipper SUDA, MatISSE LAMA, CLARREO, FOXSI, IMAP, CIRBE, CTIM, CUTE, SPRITE
NOAA: GOES-T & U EXIS
UAE: Emirates Mars Mission EXI, EMUS
Current mission operations:
AIM, SORCE, CSIM, MinXSS-2
Planets visited: All eight, plus Pluto and beyond (Voyager)
Colorado economic impact: 300 local suppliers

Students are involved at all levels

The laboratory currently employs 145 University of Colorado Boulder undergraduate and graduate students, who are integrated into work teams in all areas of LASP operations. They are the next generation of space professionals: scientists, engineers, and mission operators—the future experts of space exploration.

For more about current accomplishments at LASP, visit http://lasp.colorado.edu.

The Laboratory for Atmospheric and Space Physics (LASP) combines all aspects of space exploration through our expertise in science, engineering, mission operations, and data management. As an institute at the University of Colorado Boulder, LASP includes students throughout our activities. Learn more at http://lasp.colorado.edu.

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