



The Science Education Team and space science groups at Los Alamos National Laboratory are committed to the improvement of space science education throughout the state of New Mexico and the nation. Through a variety of enhancement programs, we have helped teachers and students increase their space science content knowledge as well as their scientific thinking and space science lesson planning and development according to New Mexico's Science Content Standards.

We invite you to peruse the [background for Los Alamos Space Science Missions](#) and our site of [lessons and classroom activities](#) developed for the LASSO project, a combination of on-going NASA projects that include Los Alamos National Laboratory science instrumentation and personnel. These lessons and activities, appropriately designed for a variety of educational levels and based on the actual science learned from the LASSO projects, were prepared by teams of teachers from New Mexico. In addition to the lessons and classroom activities, we have included numerous [links](#) to appropriate space science sites and a [glossary](#) of space science terms. A new addition to the site is a [photo gallery](#) of student work based on the LASSO lessons. New pictures will be added as they are received.

The space science projects included in the LASSO project:

[ACE](#) - Advanced Composition Explorer - focus on Solar Wind composition

[TWINS](#) - Two Wide Angle Imaging Neutral Atom Spectrometers - focus on how the Magnetosphere parts interact

[GENESIS](#) - Solar Wind Sample Return Mission - focus on the Solar Wind elemental and isotopic composition

[Lunar Prospector](#) - remote sensing to explore the nature and composition of the Moon

[LIBS](#) - Mars Instrument Development Program - lasers used to determine chemistry of rock and soil particles - testing a prototype instrument for NASA's Mars exploration program.

In addition, LASSO participants will expand their space science knowledge base in the following areas:

<p>BASIC SCIENCE</p> <p>Introduction to space science</p> <p>LANL Space Science involvement</p> <p>The Basics (physical sciences)</p> <p>Distance and Time scales</p>	<p>SOLAR SYSTEM</p> <p>The Sun</p> <p>Solar Wind</p> <p>Magnetospheres</p> <p>Space Weather</p>	<p>INSTRUMENTATION</p> <p>Space Science Instrumentation</p> <p>MPA Instruments</p> <p>Micro-systems</p>
<p>PLANETARY STUDIES</p> <p>Tour of the Planets</p> <p>Remote sensing on Mars</p> <p>The Moon</p>	<p>DATA PROCESSING & ANALYSIS</p> <p>Data processing</p> <p>Data analysis</p> <p>Modeling and simulation</p>	<p>ACTIVITY DEVELOPMENT</p> <p>Finally, participants will be involved in the following educational endeavors:</p> <p>Tour of LANL Space Science Facilities and visit to Bradbury Science Museum</p>

We hope you enjoy and benefit from the Space Science Lessons created by our teachers.

Application Materials

If you are a 4th through 12th grade science teacher, you may want to consider becoming a LASSO teacher. We are anticipating a continuation of funding for the 3 week 2007 LASSO Summer Institute and will be soliciting applications from all teachers in New Mexico, southern Colorado, northeastern Arizona, southeastern Utah, and west Texas. Please Contact Lorenzo Gonzales (see contact information below) for information on possible dates and getting on LASSO Application list.

(Application will be put online and sent to teachers by request as soon as LASSO Training dates are finalized April 6, 2007)

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