Tuesday, March 14, 2006

POSTER SESSION I: EDUCATION AND PUBLIC OUTREACH:
TRAINING TEACHERS, ENGAGING STUDENTS, INVOLVING THE PUBLIC
7:00 p.m. Fitness Center

Holden P. N. Faszewski E. E.
The Clear Sky Experience: NASA Jumpstarts an Elementary Science Teaching Program [1641]
Wheelock College has moved forward with a new program to produce scientifically skilled and knowledgeable pre-service elementary teachers. A science design team consisting of science and education faculty has planned and begun implementation of the program working through NASA’s NOVA Program.

Fauerbach M. Couch T.
Introductory Space Science — An Inquiry-based Approach [1112]
This poster is an overview of a novel course, which utilizes “space science” as the overarching theme to provide inquiry-based, hands-on activities, which combine mathematics and science content. Student responses to this class will be reported.

Aubele J. C. Stanley J. Grochowski A. Jones K. Aragon J.
Students’ interest in Mars can be used as a “hook” to teach a wide range of topics. Mars-related science is used as the basis of a new K–12 integrated curriculum created by the New Mexico Museum of Natural History and classroom educators.

Lebofsky L. A. Lebofsky N. R. Sears D. Schmitt B.
STORI and ORION: Bringing Inquiry into the Classroom [1107]
We have developed two hands-on observing programs for teachers in Arizona, Arkansas, and Ohio. STORI and ORION have created standards-driven and inquiry-based investigations for developing significant understanding of Space Science content.

Grier J. A. Ruberg L. Perrow K.
Balloon Science: Towards Building a Strong Community of Scientists, Administrators and Educators to Promote Partnerships for Suborbital Research and Learning [2142]
The Balloon Science Program is an ideal venue for development of robust research programs as well as learning opportunities. We are facilitating partnerships, old and new, between parties interested in the Balloon Science and suborbital programs.

Kuhlman K. R.
Student NanoeXperiments for Outreach and Observational Planetary Inquiry (SNOOPY): An Update [2333]
Proposed potential instrument payload for student participation in missions to the Moon and Mars.

Croft S. K. Pompea S. M.
Braving the Wilderness of Rocks: Educational Outreach Among the Asteroids [2208]
A new middle school educational outreach program involving the classification and characterization of NEOs and asteroids is being developed at the NOAO in anticipation of the flood of new asteroid discoveries that is being produced by professional search programs.

Flanagan C. de Villiers G. Tlaka C.
Involving Learners in Planning TNO Observations with SALT [1812]
We present a “real science project” at the Johannesburg Planetarium in which learners from less-well-resourced schools helped plan observations at SALT by “observing” home-made “minor planets” using cellphone cameras and photo-software.

Pennypacker C. R. Miller J. P. Canaday M.
Search for Asteroids and Kuiper Belt Objects: A National Research Program for High School and College Students [1010]
Global Hands-On Universe (Lawrence Halls of Science, UC Berkeley) conducts national astronomy research programs for high school and college students. Using Collaboratory (Northwestern University), students work with professional researchers via the Internet.
An Internet Observatory for Solar System Astronomy at the University of North Dakota

The University of North Dakota has recently begun operating a renovated remote Internet observatory for planetary science research and education. Besides education, the observatory is also being used for asteroid astrometry and photometry studies.

Virtual Field Trip to Mars: Experiences with a Virtual Reality Lab for Undergraduate Students

We present experiences with conducting a Virtual Reality Lab for undergraduate students. Students choose an area of their interest, pose some questions and try to answer them during the lab. Our positive experience indicates that VR might be a useful medium for conducting such educational exercises.

Meteorite Identification and Classification Using Magnetic Susceptibility

Magnetic susceptibility measurements of eight meteorites in the collection of the Institute of Meteoritics are consistent with literature data and confirm the usefulness of this technique for meteorite identification and classification.

Virtual Space Camp Video Game

With advances in computers, graphics, and especially video games, manned space exploration can become real, by creating a safe, fun learning environment that allows players to explore the solar system from the comfort of their personal computers.

MOONWORLD: A MMORPG Needs Your Input

Schoolwork is boring. Videogames exciting. Vid-game learning now?

Public Outreach and Education with Meteorites Involving a Museum Exhibit, Website, and Teacher Workshops

In 2003, members of the Cascadia Meteorite Laboratory were awarded an E/PO grant to increase knowledge about meteorites among the public, K–12 teachers, and students. Here we pass on some of the lessons we learned.

Wetumpka’s Annual “Crater Tours” — An Unusual Educational Outreach Activity in Planetary Science

Scientific discoveries confirming that the Wetumpka structure is of impact origin have affected city and county planning for tourism. One unique aspect of this public outreach is the annual “crater tour” organized by the city and county and conducted by graduate students in planetary geology.

Teaching, Modeling and Mentoring Graduate and Undergraduate NASA Space Grant Students on How to be Effective in STEM Outreach Using Immersive Experience, Personal Storytelling, and Focused Educational Opportunities

The ASU/NASA Space Grant Program has created a teaching, modeling, and mentoring program for its graduate and undergraduate students to help train them in best practice methodologies and approaches so they can become more proficient at STEM outreach.


The 8th Concise Atlas of the Solar System deals with planetary chemistry: (a) igneous rocks, (b) Mössbauer spectra, (c) weathering of the martian rocks, (d) photochemistry, (e) terrestrial circulation of elements, (f) water-ammonia mirror for amino acids.

Impacts: Its Processes, Traces and Effects — A Textbook

A textbook about impacts in Hungarian, is the first such publication dealing with impacts in detail, with emphasis on morphology.
*New Capabilities of the ADS Abstract Service* [#1691]  
The ADS Abstract Service provides a sophisticated search capability for the literature in astronomy and physics. The ADS is free to anybody world-wide. New features have added significant new functionality to the ADS.

Bigwood D. P.  
*Enhancing Access to Space Science Literature* [#1880]  
By participating in the Name Authority Program Component and Subject Authority Cooperative Program of the Program for Cooperative Cataloging of the Library of Congress even the smallest libraries can enhance access to the space science literature.