

UNIVERSE 2001

113th Annual Meeting of The Astronomical Society of the Pacific



co-sponsored by

Astronomy

Astronomy.com

July 13–18, 2001

Radisson Riverfront Hotel ■ St. Paul, Minnesota

www.aspsky.org/meetings.html

SCHEDULE

Astronomy and space enthusiasts are invited to join the Astronomical Society of the Pacific for Universe 2001!

DATE	EVENT
May 18	Early Bird Pre-registration ends
July 3	Pre-registration ends
July 13	On-site registration begins at 12:00 PM Star party hosted by the Minnesota Astronomical Society (evening)
July 14–18	On-site registration
July 14	Universe 2001 Expo ASP Awards Gala (evening)
July 15	Universe 2001 Expo ASP Membership meeting Welcome Reception for Teachers' Workshop and High-Energy Astrophysics Attendees (evening)
July 16	Mini Expo Teachers' Workshop High-Energy Astrophysics Symposium Public Lecture with Dr. Harvey Tananbaum, Director of the Smithsonian Astrophysical Observatory's Chandra X-ray Center (evening)
July 17	Mini Expo Teachers' Workshop High-Energy Astrophysics Symposium
July 18	High-Energy Astrophysics Symposium

UNIVERSE 2001 EXPO

The Astronomical Society of the Pacific, *Astronomy Magazine*, and Astronomy.com are delighted to present UNIVERSE 2001 EXPO—an astronomy exhibition and lecture series for scientists, educators, hobbyists, and astronomy enthusiasts of all ages. The weekend Expo will feature:

◆ Talks by leading astronomers, educators and authors

Virginia Trimble (University of Maryland and University of California, Irvine) "*Astrophysics Faces the Millenium*"

David H. Levy, noted author and comet discoverer, (Jarnac Observatory Inc., Vail, Arizona) "*The ASP, a Total Eclipse, and Magic*"

Alex Filippenko (University of California, Berkeley) "Einstein's Biggest Blunder? The Case for Cosmic 'Antigravity'"

William Sheehan, noted author and planetary historian "*Mars Approaches: Three Millennia of Martian Studies and What*

They've Taught Us—About the Planet and About Ourselves."

Bob Berman, columnist *Astronomy* and *Discover* magazines, "*The Greatest Sky-Spectacles of the 21st Century*"

Alan Dressler (The Observatories of the Carnegie Institution of Washington) "*Astronomy in the New Millennium: A Near and Far View*"

as well as other talks by NASA astronaut Claude Nicollier, Robin Canup of the Southwest Research Institute, Arizona State University's Jeff Hester, and Andrew Fraknoi of Foothill College.

- ◆ **KidSpace**, cosponsored with the Science Museum of Minnesota
- ◆ **Book signings**
- ◆ A fabulous chance to win a Meade telescope!
- ◆ **Silent auction** and door prizes
- ◆ **Exhibit Hall**, filled with dozens of exhibitors with the latest astronomy products, books and more. Not to mention science updates and the latest information from organizations like The ASP and NASA missions.

TEACHER'S WORKSHOP

"Universe in the Classroom" A Workshop on Teaching Astronomy in Grade 3–12

July 16–17, Monday–Tuesday, 8:30 AM–5:30 PM
(Includes admission to Universe 2001 Expo)

Explore the universe of astronomy teaching with noted astronomers and veteran science educators as your guides. No background in science required!

You are invited to participate in a national workshop on teaching astronomy in grades 3–12, designed for teachers, school librarians, curriculum specialists, and youth-group leaders. We especially want to encourage those educators who are new to (or nervous about) teaching astronomy to attend.

There will be separate hands-on sessions for teachers who have not had much background in astronomy and for those seasoned science teachers who would like to hear about new developments and teaching resources. The fee includes a package of classroom activities, annotated resource lists, practical teaching hints, and admission to Universe 2001 Expo. Continuing Education Credit for the workshop is available.

Workshop leaders include: Dennis Schatz (Associate Director, Pacific Science Center, Seattle), Andrew Fraknoi (Director of Project ASTRO through The ASP), as well as other national science educators from around the country from

NASA Centers, science museums and colleges that take science teaching seriously.

The Workshop program will feature such sessions as:

- ◆ A Tourist's Grand Tour of the Planets
- ◆ Making a Comet in Your Own Classroom
- ◆ Black Holes: Spacwarps, Time Machines, and the Excruciating Deaths of Stars
- ◆ Astronomy on Your Computer
- ◆ Make Your Own Star and Constellation Finder



Seattle), Andrew Fraknoi (Director of Project ASTRO through The ASP), as well as other national science educators from around the country from

HOTEL AND TRAVEL ARRANGEMENTS

Radisson Riverfront Hotel Accommodations:

11 E. Kellogg Blvd.
St. Paul, MN 55101
651-292-1900

The ASP has made special hotel arrangements with the Radisson Riverfront Hotel, site of the Astronomical Society of the Pacific's 113th annual meeting. Rates are \$102.00 standard single or double. Additional rates are available for suites and executive rooms. Room rates will be honored three days prior and three days after the convention dates.

Across the boulevard from the still magical Mississippi River, and in the heart of downtown St. Paul, sits the beautiful Radisson Riverfront Hotel St. Paul. Twenty-two floors up, the Twin Cities only revolving restaurant, Carousel, provides guests with breathtaking views of this historic Minnesota city.

The grandeur of St. Paul's Cathedral, the spectacle of the World Trade Center, and the gift of the Ordway Music Center are all within a few blocks walk from the hotel. The renowned Science Museum of Minnesota and Omnitheater is within easy walking distance, and so too, is shopping that appeals to every purse or pocket. Ride a riverboat and relax, catch a train and travel Mississippi tracks, bus to historic Lowertown or the world famous Mall of America (known locally as the Mega Mall.)

Northwest Air Fare Discounts:

Northwest Airlines, our preferred airline, is offering special meeting fares for all attendees of the Astronomical Society of the Pacific's 113th annual Meeting. Book early and take advantage of the promotional fares that give you the greatest savings! Earn a 10% discount off the published fare when booking at least 60 days in advance of departure and 5% off tickets purchased 59 days or less before departure. Fares are valid from July 9-21, 2001. Reservations may be made by calling 1-800-328-1111, M-F 7:30am to 7:30pm (CT) refer to WorldFile number NELZ3. Unfortunately, the discounts are not available through the Northwest website.

National Car Rental Discounts:

National Car Rental has been appointed the official car rental supplier for the attendees of Universe 2001. To make your reservation and receive the discounted group rate, please call 1-800-227-7368 or your travel agent and give ID number 6800601. Rates are valid July 6-25, 2001.

FOR MEETING UPDATES:

www.aspsky.org/meetings.html



HIGH-ENERGY ASTROPHYSICS SYMPOSIUM

"The High-Energy Universe at Sharp Focus: A Symposium of Chandra Science"

July 16-18, Monday-Wednesday

8:15 AM Opening comments by Dr. Harvey Tananbaum (MONDAY ONLY)

8:30 AM-5:30 PM daily

(Includes admission to Universe 2001 Expo)

To mark the second anniversary of the launch of the Chandra X-Ray Observatory, this 3-day Chandra Science Symposium will be held as part of the Astronomical Society of the Pacific's 113th Annual Meeting.

This symposium will be the first major international scientific meeting dedicated to the exciting results from Chandra, NASA's newest Great Observatory. The program will include all major science areas covered by Chandra observations—supernova remnants and pulsars, stars, Solar System objects and comets, x-ray binaries, cataclysmic variables, galaxies, active galactic nuclei, clusters of galaxies, and surveys—and will be highlighted by numerous invited review talks by noted experts in each area. Contributed papers and posters are also included, with ample break-out time for discussions of posters and participants' ongoing research activities.

The ASP's High-Energy Science Symposium is co-sponsored by the University of Minnesota Department of Astronomy and the Chandra X-ray Observatory Center.

Abstract submission deadline: 15 June 2001.

Because of limited time for contributed papers, registrants are asked to submit poster abstracts with their registrations through the Meeting website (www.aspsky.org/meetings.html). Based on the abstracts received, some registrants may be contacted by the Science Organizing Committee and given the opportunity to present an oral rather than poster paper.

EVENTS

Star Party

July 13, Friday 8:00 PM

The Minnesota Astronomical Society is hosting a special star party for all Universe 2001 attendees. Please visit our web site for updates on this exciting evening we are planning.

Children's Art Contest

July 14, Saturday (afternoon)

"Seeing the Invisible" Art Contest

The Astronomical Society of the Pacific is proud to announce the "Seeing the Invisible" Contest, an art contest in two categories for students in grades 4-7 and 8-12.

Beyond the rainbow of colors that human eyes can see is an amazing universe of invisible light. Imagine you can see with the infra-red eyes of SOFIA or SIRTIF, the x-ray eyes of Superman or the Chandra satellite, the ultraviolet eyes of the Hubble Space Telescope or the radio eyes of world's giant radio telescopes. How different would the world look? How different would the night sky look? Create a new view of the universe as seen through these new eyes for this art contest.

How Do You Win?

Create a painting, drawing or cartoon showing a new view of the universe, revealed through invisible light. To be eligible the art works must:

- ◆ be no larger than 9" x 12"
- ◆ related to the theme "Seeing the Invisible"
- ◆ show imagination and creativity
- ◆ be postmarked by June 15, 2001

Check out our web site <http://www.aspsky.org/meetings.html> for complete contest prizes and rules. We cannot be responsible for entries lost in the mail. Contest void where prohibited by law. Submissions become the property of The ASP.

Send entries to: Art Contest, ASP, 390 Ashton Ave., San Francisco, CA 94112, USA

ASP Awards Gala

July 14, Saturday 7:00 PM

Begin the evening by mingling during the cocktail hour (with music and a cash bar) and follow that by enjoying a buffet dinner at 8:00 pm. The evening concludes with the anticipated ASP Awards presentation, highlighting the work and dedication of six individuals.

"Chandra—NASA's Newest Great Observatory"

Public Lecture by Dr. Harvey Tananbaum, Director of the Smithsonian Astrophysical Observatory's Chandra X-ray Center (CXC)
July 16, Monday 7:00 PM

REGISTRATION FORM & FEES

Anyone is welcome to register for any workshop, symposium, or event.

Please fill in or circle where appropriate:	EARLY BIRD (Up to 5/18/01)	REGULAR (After 5/18/01)	TOTAL
ASP Membership Not a member of The ASP? Join now and receive the meeting discounted membership rates along with a subscription to <i>Mercury</i> , the Society's bimonthly magazine of popular astronomy and education articles; 10% discount on all purchases from The ASP Catalog of educational products; discounts on Society-sponsored educational workshops and scientific symposia; and more!			
Regular rate	\$35	\$35	\$
Technical rate	\$95	\$95	\$
Universe in the Classroom Workshop (includes Universe 2001 Expo)			
ASP member	\$107	\$125	\$
Non-member	\$119	\$139	\$
High Energy Astrophysics Symposium (includes Universe 2001 Expo & Symposium proceedings)			
ASP member	\$219	\$249	\$
Non-member	\$241	\$279	\$
Student (no proceedings)	\$140	\$180	\$
Admission to Universe 2001 Expo	\$20	\$20	\$
ASP Awards Gala – July 14	# of tickets: ____ x \$50		\$
Subtotal:			\$
Please add my Tax-deductible contribution to The ASP:			\$
TOTAL:			\$

I will be attending the special complementary Star Party Friday, July 13th

Please add my Tax-deductible contribution to The ASP:

TOTAL: \$

PAYMENT:

Check or Money Order (made out to "The ASP")

Visa MasterCard Discover

Card Number:

Expiration Date: __ / __

Signature: _____

My ASP membership #: _____

I am a member of the Supporter's Circle.

Name:

Last Name _____

First Name: _____

Affiliation: _____

(as you would like it to appear on your badge)

Mailing Address (Number, Street, and Apartment):

City: _____

State: _____ Zip: _____

Country: _____

Phone: _____ - _____ - _____ ext. _____

Fax: _____ - _____ - _____

E-mail: _____

Additional Names for Universe 2001 Expo:

Last Name _____

First Name: _____

Last Name _____

First Name: _____

REGISTRATION INFORMATION

Register on line:

www.aspsky.org/meetings.html

Registration may also be mailed with check, money order, or credit card information in US funds to:

ASP Annual Meeting
390 Ashton Avenue
San Francisco, CA 94112
Fax: 415.337.5205

ONLY Credit card information may be faxed. Please use a separate copy of the form for each workshop or symposium participant. Reserve soon, as availability is limited.

Registration Confirmation

An acknowledgment of your registration will either be mailed or e-mailed to you within two weeks of receipt. We will not mail the registration packets beforehand. If you do not receive an acknowledgment within three weeks, please contact us.

Registration packets will be held for pickup at The ASP registration booth at the Radisson Riverfront Hotel, anytime during registration hours starting Friday, July 13 at noon.

Cancellation/Refunds

Requests for cancellation must be received in writing by June 5 to receive refunds minus a \$25 processing fee. Name changes are allowed. Please allow up to eight weeks for refund. People who register but do not attend will NOT receive a refund. There can be no refunds for dinner tickets.

Not a member of The ASP?

Join The ASP now and receive the discounted membership rates. For technical membership (including our technical journal—the PASP, *Mercury*, and 10% off catalog purchases) please contact The ASP at (415) 337-1100 x105.



www.aspsky.org/meetings.html