



Capture the Colorful Cosmos 2009

astrophotography using online telescopes • international year of astronomy

Join the Harvard-Smithsonian Center for Astrophysics, NASA, and the Association of Science-Technology Centers for a unique, free astronomy program that includes a professional development opportunity and financial support for a limited number of visitor-created events. This program is a celebration of the International Year of Astronomy and the COPUS Year of Science Month of Astronomy in July.

From July 20 through 24, take part in an ASTC Connect online workshop for museum and astronomy educators. Participants will learn how to access robotic telescopes, take photographs of planets, galaxies, and nebulae and use image processing tools to bring out detail in these photos the same way that professional astronomers do. Registered workshop attendees can also apply to become one of 33 participants to receive a "micro-grant" to their organization - an award of \$1000 US to support the hosting of a visitor-created exhibition or display. Inspire your visitors to take and manipulate their own astronomical photographs and create original displays and exhibits to *Capture the Colorful Cosmos!*

What?

This program starts with an online workshop for museum and astronomy educators delivered on ASTC Connect. This workshop will introduce users to MicroObservatory, an online telescope network run by the Center for Astrophysics, which allows you to request images of planets, galaxies, and nebulae, all from your own computer. Open a web browser, select the telescope targets and exposure time, and the images will be taken that evening and emailed the next day.

Once you have some image files, you can use the tools in MicroObservatory to enhance these photos, sharpen and refine the view of your object, and use filters to create stunning colorful interpretations or real-color images. Compare your own images to those from NASA telescopes.

Now that you have learned how to make these images, help your visitors to take their own astrophotographs and to create displays or exhibits to show in public. A limited number of micro-grants are available to offset the costs of supplies, materials, or staff time required to organize this visitor-created event. During the online workshop, we'll show you some examples of projects and provide a place for you to brainstorm ideas. Some conditions apply to the award and use of these grants. Read them carefully - they are described below under the heading "How."

Why?

This project is idea of educators at the Harvard-Smithsonian Center for Astrophysics. The goal is to engage newcomers to astronomy in the wonders of the universe by making images of the cosmos accessible and by encouraging individual interpretations of these images. Supported by NASA's Science Mission Directorate and the Smithsonian Observatory, this project builds on MicroObservatory's past successes in museum exhibits and after school programs across the U.S. ASTC is proud to present this wonderful opportunity to museums, science centers, and astronomy fans.

What does it Cost?

Nothing! This is a free opportunity for museum and astronomy educators who work in an out-of-school setting.

When?

The online workshop will take place from July 20 through July 24, 2009. This is an asynchronous text exchange that runs through emails and online discussion forums. To participate, you need to have an account on ASTC Connect. This is a free service and we do not share email addresses or user lists with any other parties. To participate in the workshop, send an email request for enrollment to cosmos@astc.org by July 15, 2009. You do not have to commit to the visitor-created event to enjoy the workshop.

There will be two live videochats offered during this week. Technical tips for participants will be posted to the forum in advance of these events.



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At the close of the workshop, attendees will have the chance to apply for a micro-grant. A link will be posted in the online workshop space for application. The visitor created exhibit or display will have to take place by September 30, 2009. Applicants will be asked to sign a letter of commitment prior to receiving the grant. Funds will be available to be distributed in early August. Grantees will be asked to provide feedback about their event by October 15, 2009. These event descriptions will be posted within ASTC Connect to share with the community.

How?

Here's a summary of important facts and dates to participate in this opportunity:

- Request to be enrolled in the ASTC Connect online workshop *Capture the Colorful Cosmos* by July 15, 2009 (email cosmos@astc.org)
- Participate in the online workshop July 20-24, 2009
- Fill out and submit an online application form for micro-grants (\$1000 US/ 1 per institution) starting July 27, 2009
- Download and sign a Letter of Commitment starting on July 27

Micro-grants will be awarded on a first-come, first-served basis to the first 33 applicants that have 1) participated in the workshop; 2) filled out the online application form; and 3) submitted a signed letter of commitment. Steps 2 and 3 can be done electronically. The necessary links and documents will be emailed to everyone enrolled in the course; electronic timestamps will be used for order of receipt. Please note that NASA and the Center for Astrophysics are particularly interested in strategies for using MicroObservatory with audiences traditionally underserved by space science education programs.

More Questions?

Email any questions to cosmos@astc.org. We'll get back to you with additional information.