

Imaging the Sky with Digital, Web & Video Cameras Conference

Saturday June 26, 2004

Mt. Hood Community College Planetarium Sky Theater

Digital, web, and video cameras are being used by amateur astronomers to image the Sun, the Moon, and the planets. This conference covers using these cameras, their strengths, their weaknesses, mounting them to a telescope and tips on image processing. You will see a wide range of imaging techniques used by northwest amateur astronomers. This conference is designed for everyone, including those who have no prior astronomy imaging experiences. Conference attendees will receive a conference CD-ROM with presentations, imaging information and related software.

Schedule

8:30 am	Registration
9:00 am	Imaging Basics, Mel Bartels
10:30 am	Image Processing, Richard Berry
11:45 am	Lunch on your own
1:00 pm	Web Cameras, David Haworth
2:30 pm	Digital Cameras, Richard Berry
4:00 pm	Video Cameras, Craig Zerbe
5:15 pm	Dinner on your own
7:00 - 11:00 pm	Weather permitting first quarter Moon imaging demonstrations

Register early because seating is limited. Registration is \$30.00 by May 31, 2004 and in June it is \$40.00. Schedule is subject to change. For more information and registration, visit www.its-ccd.org. Sponsored by Mt. Hood Community College Science Club and Planetarium Sky Theater, 26000 SE Stark Street, Gresham, Oregon

Speakers

Mel Bartels, www.efn.org/~mbartels/

A member of the space age generation, Mel Bartels has been looking "up" since the 1960s. Interests in deep sky observing and cold camera astrophotography turned to large thin mirror grinding when he met John Dobson in 1980, and was given a night on John's 24". Mel has ground 100 mirror surfaces up to 30" in size, and led a Telescope Optics Workshop in Bellingham Washington where half a dozen people figured 16" mirrors.

Mel ran the Amateur Telescope Makers listserv for six years, a worldwide group dedicated to sharing and advancing the art of telescope making.

For the past fifteen years, Mel has worked on computer control of motorized telescopes, and developed a freely distributed control system that in use worldwide. In addition, Mel continues developing innovative mounting designs.

Recently the International Astronomical Union honored Mel by naming asteroid 17823 Bartels for his contributions to amateur astronomy.

A former musician and teacher, Mel supports himself during the day developing business applications.

Speakers

Richard Berry, www.wvi.com/~rberry/index.html

Richard Berry has been an amateur astronomer for as long as he can remember. At age 13, he built his first telescope, and he has been building telescopes ever since. In the decades since Berry's first book, *Build Your Own Telescope*, was published, thousands of people have built telescopes based on the book's plans, and more recently, the book has come into widespread use among home-schoolers and their parents.

In 1976, Berry joined the staff of the recently founded *Astronomy* magazine. In sixteen years as its editor, he built *Astronomy* from a struggling newcomer to the largest circulation astronomical magazine in the world. He also founded *Telescope Making* and for ten years edited the journal that was the driving force behind the breakthroughs that made the 1980s explosive years in the growth of amateur astronomy.

For his contributions to the advancement of amateur telescope making, Berry received the Clifford W. Holmes Award, and for his contributions to the public understanding and appreciation of astronomy, he received the Astronomical Society of the Pacific's Dorothea Klumpke-Roberts Award. For his efforts to further astronomy and amateur telescope making through his writing, editing, and teaching, the Astronomical League presents him with the Omega Centauri Award at the Texas Star Party. In addition, the International Astronomical Union honored him by designating Asteroid 3684 as Berry.

Berry has continued working at the cutting edge of amateur astronomy. His recent books focus on teaching amateur astronomers build and operate sensitive charge coupled device based digital cameras capable of discovering and measuring new asteroids, faint comets, variable stars, supernovae, as well as enabling amateur astronomers to make outstanding images of the ever-changing planets and familiar deep-sky objects.

Berry now works as a full-time writer/programmer, researching books about astronomy, creating software for image processing, consulting for publishers and telescope manufacturers, speaking on astronomy to amateur astronomers and the general public, and writing articles and books about all phases of astronomical discovery.

Books by Richard Berry: *Build Your Own Telescope* (Willmann-Bell, Inc.), *Discover the Stars* (Crown), *Telescope Optics: Evaluation and Design* (as editor, Willmann-Bell, Inc.), *Introduction to Astronomical Image Processing* (Willmann-Bell, Inc.), *Choosing and Using a CCD Camera* (Willmann-Bell, Inc.), *The CCD Camera Cookbook* (with Veikko Kanto and John Munger, Willmann-Bell, Inc.), *The Dobsonian Telescope* (with David Kreige, Willmann-Bell, Inc.), *The Handbook of Astronomical Image Processing* (with Jim Burnell, Willmann-Bell, Inc.)

Craig Zerbe, www.AstroImaging.com

Craig Zerbe is acknowledged as one of the leading lunar imagers in the world. His video images have been featured numerous times in *Sky & Telescope* and *Astronomy*. Most recently his video images appeared in *The Modern Moon* just published by *Sky & Telescope*. Zerbe uses "standard" off the shelf equipment and software with no custom modifications.

Zerbe will discuss the advantages of video imaging, available video equipment, how to image the Moon, Planets, Sun and Deep Sky objects with video, recording your images, computer transfer, and image processing. You will also see the results achieved by Zerbe and some of the world's best video imagers. For more information visit his site at www.AstroImaging.com

David Haworth, www.stargazing.net/david

David Haworth started astronomy imaging with a Cookbook CCD camera he built in 1996. Since then he has used 35mm film, CCD cameras, digital cameras and web cameras to image the sky. His images have appeared in *Lunar Photo of the Day* (LPOD), *Astronomy.com* Photo Gallery, *Spaceweather.com* and *Images of the Moon E-Book*. David enjoys astronomy imaging and processing images to bring out details that cannot be seen by visual observing.