

# **STELLAFANE**

1926-1991

Saturday, August 10, 1991
The 56th Convention of Amateur Telescope
Makers on Breezy Hill in Springfield, Vermont.

Friday evening, August 9th, at 8:30 p.m., the Springfield Telescope Makers will conduct an informal program under the tent behind the Stellafane clubhouse. If you wish to contribute a short talk during this session, you must submit a brief description of your planned presentation with your registration form. Talks are limited to 10 minutes and 20 slides -- the time limit will be strictly enforced. A

35-mm slide projector is available. Following the informal talks there will be observing (weather permitting) with the Porter Turret Telescope in front of the clubhouse.

The Hartness-Porter Museum of Amateur Telescope Making is located in the underground rooms of the Hartness Turret Telescope at Hartness House in Springfield. Convention-goers can plan a visit to the museum on Saturday or Sunday. Light meals and snacks are available at Stellafane Friday evening and throughout the convention on Saturday. Barbecued chicken dinners are available for Saturday's lunch and dinner. Cooking is allowed in the camping area, and drinking water will be provided at the camping site beginning Friday afternoon. Camp stoves, charcoal grills, and the like are allowed, but no open fires are permitted.

#### TELESCOPE COMPETITION

This is a convention of amateur telescope makers. If you have built a telescope, we encourage you to bring it and also enter it in the competition. Awards are presented for mechanical and optical performance. There are also awards for the best junior telescope (made by a person under 16 years of age) and other special categories. Judging for mechanical excellence begins at 10:00 a.m. Saturday, so please register your telescope at the clubhouse and have it on display as early as possible. Registrations will not extend beyond noon. We try to have the judging completed in time for all to attend the afternoon talks. Judging for optical excellence begins immediately following the evening program (weather permitting). Only telescopes that are operative both mechanically and optically will be accepted in the competition. However, telescopes do not have to be iudged in both categories. We also welcome all homemade telescopes in the display area; they do not have to be entered in the competition. The Porter Youth Award acknowledges the junior exhibitor (under 16 years of age) who shows the most promise for a career in science.

#### CAMPING/PARKING AREA

Clearing continues on the land purchased for the Stellafane convention site several years ago by the Springfield Telescope Makers. Last year was the first time in a decade we accommodated all the campers who request a site, and we hope it will happend this year too. Nevertheless, camping and parking space will still be tight. People interested in camping must read the special instructions in the camping registration section of this mailing. Convention officials at the registration gate will direct participants to the appropriate camping and parking areas. Controlled traffic is allowed to the clubhouse on Breezy Hill for unloading and picking up telescopes. Unless otherwise allowed by a convention official, there is no parking around the clubhouse. There is no assurance that light-free conditions will be maintained in the camping area. If you must avoid lights, please bring your telescopes and cameras to the display field by the clubhouse. Furthermore, since there will also be observing from the camping area, we ask everyone to be considerate of others and avoid any unnecessary use of bright lights at night.

#### **SWAP TABLE**

The swap table is where convention participants can trade or sell their astronomical and telescope-related items such as eyepieces, lenses, cameras, mirror-making materials, and observing accessories. This table is not for commercial sales. Participants must be responsible for their own material at the table, which operates all day Saturday until 7:30 p.m. at the southwest edge of the campground.

# AFTERNOON PROGRAM

This year's Saturday afternoon program begins under the tent behind the clubhouse at 2:00 p.m. Scott Milligan of the Springfield Telescope Makers is the master of ceremonies.

# Building a Laser Interferometer

-- Barry Levin

A Stellafaner from Brooklyn, New York, Barry Levin has a long-time interest in optics and optical testing. He has experimented with several common-path laser interferometers that can be fabricated by amateur telescope makers. He will describe an inexpensive, vibration-insensitive interferometer that is well suited for evaluating complete optical systems.

# CCD Imaging for Amateur Astronomers

-- Gary Walker, George East, and Ed Dougherty

For more than a decade the mainstay of imaging detectors for professional astronomy, electronic CCD cameras are working their way into amateur astronomy. This is a trend that's sure to continue as personal computers become ever more powerful and the prices of CCD cameras drop. In addition to their well-known ability to record faint objects with amazingly short exposures, CCD's offer amateurs the chance to explore the cosmos though the window of image processing.

The three speakers, all members of the Amateur Telescope Makers of Boston and long-time Stellafane attendees, have a wide range of experience with commercial and home-brewed CCD's. They will present a basic primer on what amateurs need to know before they enter the realm of electronic imaging. They will also highlight what can be done with equipment presently on the market, both expensive and inexpensive.

### **EVENING PROGRAM**

Welcome

Presentation of Awards Stellafane Shadowgram

-- Walter Scott Houston

# Stellafane Keynote Talk:

Meteorites: The Real Space Invaders

-- Sam Palmer

Meteorites are among the several hundred tons of material that fall on Earth every day from interplanetary space. (By "fall" we mean arrive at speeds from 30,000 to 160,000 miles per hour.) What are they? Where do they come from? How do we know? Why are they in such a big hurry? How do we find the little ones? What happens when a big one hits? Why are they so important to our understanding of the solar system? What are our chances of seeing one fall? Considering what may have happened to the dinosaurs, is seeing one fall such a good thing? These and other questions will be the focus of Saturday's illustrated talk, which will take place under the Perseid meteor shower!

Sam lists himself as an amateur astronomer from Massachusetts who has been a regular Stellafaner since 1978. "When I'm not doing real astronomy with my 4-inch refractor and 10-inch Dobsonian," he writes, "I work as a radio astronomer at the Harvard-Smithsonian Center for Astrophysics." Sam also teaches astronomy at the Harvard University Extension School and serves on the science panel of Project STAR, a NSF-funded program to develop a hands-on astronomy curriculum for secondary schools.

#### Excursion to Christa McAullife Planetarium

Robert K. Morse of the Springfield Telescope Makers has organized an optional trip to the Christa McAullife Planetarium in Concord, New Hampshire on Saturday, August 10th. The planetarium is named for the New Hampshire school teacher who perished in the Space Shuttle *Challenger* accident. A special presentation of "Gateway to Infinity" is scheduled for Stellafane participants beginning at 1:00 p.m. The cost of the trip, including motor coach transportation to and from Springfield and planetarium admission is \$30. The coach is scheduled to leave from the Springfield shopping plaza at 10:30 a.m. and return later in the afternoon. Reservations for the trip (accompanied by a \$30 check made out to the Springfield Telescope Makers) must be made no later than July 30th. Address reservations and further inquiries to:

Robert K. Morse

R.R. II, Box 68A

Walpole, NH 03606 (Phone 603-756-4572, evenings)