

WE HEAR THAT

Astronomical Society Bestows Honors

Last month, the Astronomical Society of the Pacific presented this year's awards, including one being given for the first time, at its annual meeting in St. Paul, Minnesota. **Hans Bethe**, professor emeritus of physics at Cornell University, was awarded the Catherine Wolfe Bruce Gold Medal, the ASP's highest honor, "for his fundamental and lifelong contributions to our understanding of how stars produce energy." Working with other physicists in the 1930s, Bethe calculated the detailed nuclear fusion reactions that power stars such as the Sun. He explained how hydrogen nuclei fuse to form helium nuclei, thus releasing energy in the process. He also explained how more massive stars generate energy through the carbon cycle. Later research helped astronomers to better understand how massive stars explode at the end of their lives as supernovae. For these and other contributions, Bethe received the Nobel Prize in Physics in 1967.

Joseph R. Caruso was recognized with the Las Cumbres Amateur Outreach Award, which is new this year. This award honors outstanding outreach to children and the public by an amateur astronomer. Caruso, a technician at the Oak Ridge Observatory, was acknowledged for making "extraordinary and sustained contributions to astronomy education and outreach in the greater Boston area for more than 25 years."

The ASP presented the Thomas J. Brennan Award, which recognizes exceptional achievement related to the teaching of astronomy at the high-school level, to **James G. Hill**, founder and director of the French Camp Academy's Rainwater Observatory and Planetarium in French Camp, Mississippi. In addition to teaching astronomy to high-school students, Hill conducts teacher workshops and introductory astronomy classes for the public and is a solar system educator

and ambassador at the Jet Propulsion Laboratory. He also established and coordinates the Mid-South Star Gaze, an annual star party held at the Rainwater Observatory.

Syuichi Nakano received the Amateur Achievement Award in part for his work in computing comet orbits for nearly a quarter of a century. Nakano is an amateur astronomer and liaison in Japan for the International Astronomical Union's Minor Planet Center, which is based at the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts. He also organizes Japanese amateur astronomers involved in astrometric work on comets and minor planets, and Japanese observers who calcu-

lations of more than 100 elliptical galaxies revealed that stars in those galaxies formed when the universe was only 10% of its current age. His findings also suggested that less massive elliptical galaxies evolve slightly faster than more massive ones, implying that the low-mass galaxies formed later, which is in accordance with theoretical predictions.

Sandi Preston, director of public information and education with the McDonald Observatory of the University of Texas at Austin, was honored with the Dorothea Klumpke-Roberts Award, which recognizes an individual's outstanding contributions to public understanding and appreciation of astronomy. Preston is responsible

for the observatory's public information and education programs, including the syndicated radio programs *StarDate* and *Universo* and *StarDate* magazine.

The ASP's Maria and Eric Muhlmann Award, which honors scientists who have obtained important research results based on their development of instruments and techniques at the forefront of technology, went to **Keith Taylor**, head of instrumentation in the astronomy division at Caltech. When he worked at the Royal Greenwich Observatory, Taylor produced the first Fabry-Perot imaging spectrograph, which enabled astronomers at the

Anglo-Australian Telescope (AAT) in central New South Wales, Australia, to investigate the velocity and distribution of elements in objects such as nebulae and nearby galaxies. He also played a key role in the development of AAT's low-dispersion survey spectrograph. He developed and managed the design and construction of the Two-Degree Field system (2Df), located at the AAT, which combines a highly complex wide-field corrector for the AAT with 400 robotically positioned optical fibers that feed a pair of multiobject spectrometers. To date, the survey has produced redshifts for more than 200 000 galaxies.

ROBERT BARKER/CORNELL



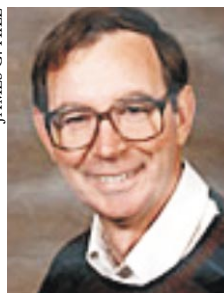
BETHE

KAREN CARUSO



CARUSO

JAMES G. HILL



HILL

TAKESHI URATA



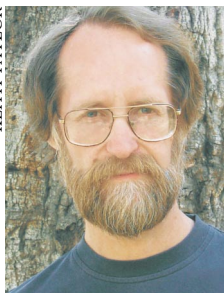
NAKANO

DAVID NEUSE/MCDONALD OBSV.



PRESTON

KEITH TAYLOR



TAYLOR

late orbits.

The Robert J. Trumpler Award went to **Michael A. Pahre** (photo unavailable), who is with the Harvard-Smithsonian Center for Astrophysics. The award is given to a recent PhD-degree recipient whose doctoral research is considered unusually important to astronomy. In 1998, Pahre received his PhD from Caltech under the supervision of George Djorgovski. Pahre studied more than 300 galaxies at optical and infrared wavelengths and found that the ages, velocities, and distributions of their stars varied according to the mass of the host galaxies. His obser-