

THE  
 ASTRONOMICAL LEAGUE  
 1976  
 NATIONAL CONVENTION

AUGUST 19 - 22, 1976  
 KUTZTOWN STATE COLLEGE  
 KUTZTOWN, PENNSYLVANIA



**Astronomical League Officers**

President .....	Rollin P. Van Zandt
Vice President .....	Russell C. Maag
Executive Secretary .....	Wilma A. Cherup
Secretary .....	James H. Fox
Treasurer .....	Frances D. Cecil

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**ASTRO CON '76 COMMITTEE**

Chairman .....	Ernest Robson
Assistant Chairman .....	Kenneth Mohr
Treasurer .....	George Maurer
A.L.P.O. Liaison .....	Dr. Thomas Roginski (L.V.A.A.S.)
Astrophotography Contest .....	Marion Robson (L.V.A.A.S.-R.A.S.)
Commercial Exhibits .....	Dr. Roland Lovejoy (L.V.A.A.S.)
Food Service .....	Mildren Guss (L.V.A.A.S.)
Housing .....	Joseph Schmidt (L.V.A.A.S.)
K.S.C. Liaison .....	Dr. Carlson Chambliss (L.V.A.A.S.)
Medical Supervisor .....	Frederick Munson, M.D. (L.V.A.A.S.)
Paper Sessions .....	Richard Cressman (L.V.A.A.S.)
Philadelphia Bus Tours .....	Frank Pentz (Berks County A.A.S.), Eleanor Vidalya (R.A.S.)
Proceedings .....	Gary Becker (L.V.A.A.S.)
Publicity .....	Robert Young (A.S.H.), Rae Klahr (L.V.A.A.S.)
Pulpit Rock Tour .....	Stanley Wilkes (L.V.A.A.S.)
Telescope Fair .....	Ellsworth Machin (L.V.A.A.S.)
Workshops .....	Robert Young (A.S.H.)

## GENERAL CONVENTION SCHEDULE

Time	Event	(see Map) Bldg. No.
<b>Monday &amp; Tuesday (August 16 &amp; 17)</b>		
12:00 PM - 8:00 PM	Registration (Dorm Check In)	8
All Day	Unescorted Touring (Tourist information will be provided at Registration Desk)	
8:00 PM	K.S.C. Planetarium Demonstration	23
9:00 PM	K.S.C. Observing (Weather Permitting)	23
<b>Wednesday (August 18)</b>		
12:00 PM - 8:00 PM	Registration (Dorm Check In)	8
9:00 PM - 12:00 PM	Astronomical League Executive Council Meetings	24 Rm. 100
2:00 PM - 5:00 PM	Astronomical League Executive Council Meetings	24 Rm. 100
7:00 PM	K.S.C. Planetarium Show, J. Loomis	23
8:00 PM	Film: AFRICAN ECLIPSE, P. Shenkle	24 Rm. 102
9:00 PM	K.S.C. Observing (Weather permitting)	23
<b>Thursday (August 19)</b>		
7:00 AM - 12:01 AM	Registration (Dorm Check In)	8
7:00 AM	Breakfast	12
8:00 AM - 6:30 PM	Philadelphia Bus Tours	F
All Day	Kutztown Country Fair	
8:00 PM	K.S.C. Planetarium Show, J. Loomis	23
9:00 PM	K.S.C. Observing (Weather Permitting);	23
<b>Friday (August 20)</b>		
7:00 AM - 12:00 PM	Registration	25
12:00 PM - 12:00 AM	Registration	8
7:00 AM - 12:00 AM	Dorm Check In	8
7:00 AM	Breakfast	12
9:00 AM	OFFICIAL OPENING CEREMONIES	25
	Ernest Robson, Convention Chairman	
	Dr. Dodson Dreisbach, Vice President of Academic Affairs, K.S.C.	
	Rollin Van Zandt, President, Astronomical League	
	Walter Haas, Chairman, Association of Lunar and Planetary Observers	
	Robert Young, Chairman, Mid-East Region of the A.L.	
	Dr. Carlson Chambliss, Associate Professor of Astronomy, K.S.C.	
	Kenneth Mohr, Assistant Convention Chairman; Director, L.V.A.A.S.	
	Wilma Cherup, Executive Secretary, Astronomical League	

Time	Event	(see Map) Bldg. No.
<b>Friday (August 20) continued</b>		
10:30 AM	GUEST SPEAKER - Dr. Martin Pomerantz, "200 Years of Solar-Terrestrial Physics"	25
12:00 PM	Lunch	12
1:30 PM - 5:00 PM	Paper Sessions A-1 & A-2 (See included Paper Schedule)	
3:30 PM	Planetarium Show, "Stargazers Stone", H. Harber	23
5:00 PM	Dinner	12
6:00 PM	Historical Exhibit, Photo Contest (One hour special viewing time)	26
6:00 PM - 8:00 PM	Pulpit Rock Astronomical Park Tours (Tickets available at desk)	F
7:00 PM - 9:00 PM	Pulpit Rock Astronomical Park Tours (Tickets available at desk)	F
7:00 PM - 10:00 PM	Paper Sessions B-1, & B-2 (See included Paper Schedule)	
9:00 PM	K.S.C. Observing (Weather permitting)	23
9:30 PM	Planetarium Show, "Stargazers Stone", H. Harber	23
<b>Saturday (August 21)</b>		
8:00 AM - 5:00 PM	Registration	25
8:00 AM - 5:00 PM	Dorm Check In/Out	8
7:00 AM	Breakfast	12
9:30 AM - 5:30 PM	Telescope Fair (Open for viewing)	17
9:00 AM	GUEST SPEAKER - Dr. Emile Benoit, "Our Sun and Human Survival"	25
10:00 AM	Astronomical League General Business Meeting	25
11:00 AM	A.L.P.O. Business Meeting	24 Rm. 100
	M.E.R.A.L. Business Meeting	24 Rm. 102
	Junior Meeting	24 Rm. 104
12:00 PM	Lunch	12
1:00 PM - 2:00 PM	Group Photographs Taken (Weather permitting)	23
2:00 PM - 5:00 PM	Paper Sessions C-1 & C-2 (See included Schedule)	
2:00 PM	Planetarium Show, "Stargazers Stone", H. Harber	23
5:00 PM	Dinner	12
6:00 PM - 7:00 PM	A.L.P.O. Business Meeting	24 Rm. 100
	M.E.R.A.L. Business Meeting	24 Rm. 102
	Junior Meeting	24 Rm. 104
7:00 PM	GUEST SPEAKER - Dan Matlega, "200 Years of Exploring Mars"	25
8:30 PM	Coffee Break	23

Time	Event	(see Map) Bldg. No.
<b>Saturday (August 21) continued</b>		
9:00 PM	Planetarium Show, "Stargazers Stone", H. Harber	23
9:00 PM	Post Telescope Fair Observing (Bring your Scope) (Weather permitting)	23
<b>Sunday (August 22)</b>		
8:00 AM - 5:00 PM	Dorm Check Out	8
8:00 AM	Breakfast	12
9:00 AM - 11:00 AM	Pulpit Rock Astronomical Park Tours (Tickets available at desk)	F
10:00 AM - 12:00 PM	Pulpit Rock Astronomical Park Tours (Tickets available at desk)	F
9:00 AM	Workshops: A.A.V.S.O. Informal Observing	24 Rm. 100
	Astrophotography, Douglas Wereb	24 Rm. 102
	- Minor Planets, Alain Porter	24 Rm. 104
	Jupiter, Paul Mackal and Phillip Budine	30 Aud.
10:00 AM	Workshops: Fund Raising Activities, Edgar Lodi	24 Rm. 100
	Amateur Astronomy From Space Analysis of Earth Resources Satellite Data, Norman Sperling	24 Rm. 102
	- Lunar, Dr. Winifred Cameron and Michael Formarucci	24 Rm. 104
	Saturn, Dr. Julius Benton	30 Aud.
11:00 AM	Workshops: Publicity and Membership Drives, Robert Young	24 Rm. 100
	- Meteor Observing, Thomas Fetterman	24 Rm. 102
	Comets, John Bortle and Charles Morris	24 Rm. 104
	Venus, Dr. Julius Benton	30 Aud.
11:45 AM	Workshops: Organizing Introductory Astronomy Courses, Mike Flick	24 Rm. 100
	Mars, (ALPO)	24 Rm. 102
	The Problems of Light Pollution George Summerman, Bob Wright	24 Rm. 104
1:00 PM	BANQUET: Awards and Prizes	12
	GUEST SPEAKER - Deborah Jean Warner, "200 Years of Amateur Astronomy"	
3:30 PM - 5:30 PM	Post Paper Session D-1 & D-2 (See attached addendum, if any)	24 Rm. 102
6:00 PM	Dinner	12
<b>Monday (August 23)</b>		
7:00 AM - 9:00 AM	Dorm Check Out	8

**SESSION A-1**  
**Friday - August 20, 1976**  
**1:30 p.m. to 5:00 p.m.**  
**Rohrbach Auditorium - Library**

GLASS, BRASS, AND CLASS	Norman Sperling Amateur Astronomer's Association of Princeton ISPE, IUAA, ASP, MAPS, RASC, AAS
COSMOLOGIES DURING THE LAST TWO HUNDRED YEARS	Peter Norman Astronomical Society of Victoria (Australia)
SKY INTERPRETATION IN THE NATIONAL PARK SYSTEM	David Batch Abrams Planetarium
THE STORY OF STELLAFANE	Edward Lindberg Buffalo Astronomical Association AAVSO
THE UNIVERSE OF TROUVELOT: THE WONDERS OF THE UNIVERSE SEEN 100 YEARS AGO	Dr. Sarah Lee Lippincott Director Sproul Observatory, Swarthmore College (Presented in absentia by Dr. Martin Pomerantz)
MATHEMATICS INSPIRED BY ASTRONOMY: A GIFT FROM A FLOWER TO A GARDEN	Robby Robson Lehigh Valley Amateur Astronomical Society
THE AMATEUR ASTROPHYSICIST	Mary W. Schiffmann Amateur Astronomers Association
THE GREAT RED SPOT - AN OBSERVATIONAL HISTORY	Richard L. Hull Richmond Astronomical Society ALPO
A QUESTION OF GRAVITY	George Maurer and Walter Leight Lehigh Valley Amateur Astronomical Society

**SESSION A-2**  
**Friday - August 20, 1976**  
**1:30 p.m. to 5:00 p.m.**  
**Boehm Science Building - Room 102**

SOME THOUGHTS ON THE AMATEUR OBSERVER -  
 PAST, PRESENT, AND FUTURE ..... Walter H. Haas  
 Director, Association of Lunar and Planetary Observers

THE INFRARED SPECTRUM OF JUPITER ..... Dr. Roland W. Lovejoy  
 Lehigh Valley Amateur Astronomical Society

TRIPLE DISTURBANCE ON JUPITER IN 1975 ..... Paul K. Mackal, M.A.  
 ALPO Jupiter Recorder

JUPITER'S NORTH TROPICAL ZONE DISTURBANCE .... Phillip W. Budine  
 ALPO Jupiter Recorder

OBSERVING SATURN:  
 WHERE DO WE GO FROM HERE? ..... Dr. Julius L. Benton, Jr.  
 Director, ALPO Saturn and Venus Sections

BRIGHTNESS VARIATIONS OF COMET KOHOUTEK  
 1973f AND COMET WEST 1975n ..... John E. Bortle  
 and Charles S. Morris  
 ALPO, AAVSO, AMS

MAGNITUDE OBSERVATIONS OF THE EARTHGRAZER  
 1580 BETULIA ..... Alain Porter  
 AAVSO, ALPO, AMS

THE DEPTH-DIAMETER RELATIONSHIP  
 OF LUNAR CRATERS ..... James H. Fox  
 3M Club Astronomical Society  
 Twin City Astronomy Club

DARK-HALOED CRATERS:  
 A CONCLUDING REPORT ..... Rev. Kenneth J. Delano  
 Director  
 ALPO Dark-Haloed Craters Program  
 AAVSO

**SESSION B-1**  
**Friday - August 20, 1976**  
**7:00 p.m. to 10:00 p.m.**  
**Rohrbach Auditorium - Library**

THE POWER OF REFRACTORS AND REFLECTORS ..... Dr. Patrick Rizzo  
 Amateur Astronomers Association of New York  
 AAVSO, BAA

RESOLUTION AND CONTRAST ..... Rodger W. Gordon  
 Lehigh Valley Amateur Astronomical Society  
 ALPO

CONSTRUCTION OF A 20" REFLECTOR ..... Arthur Grebner  
 Peoria Astronomical Society

AN ACCURATE ELECTRONIC DIGITAL SIDERAL  
 CLOCK FROM 60 Hz LINE FREQUENCY ..... Derald D. Nye  
 Denver Astronomical Society  
 ALPO, WAA, IOTA

FABRICATION OF A MARINER I.R. TELESCOPE ..... Paul Valleli  
 and Tom Waineo  
 Boston ATM'S

A METHOD OF MAKING CLOCK DRIVE WORM GEAR ... Peter R. Kwentus  
 Warren Astronomical Society

OPERATING CHARACTERISTICS OF WORM GEAR DRIVES .. Louis J. Faix  
 Warren Astronomical Society

**SESSION B-2**  
**Friday - August 20, 1976**  
**7:00 p.m. to 10:00 p.m.**  
**Boehm Science Building - Room 102**

REPORT ON PUBLIC EDUCATION PROJECT  
 & ANTI-LIGHT POLLUTION PROJECT ..... Tom Quesinberry  
 and George Gliba  
 for the Chagrin Valley Astronomical Society  
 AAVSO, ALPO, CVAS, AL, AMS  
 Astro. Soc. of Pac.  
 Lakeland Astronomical Society

RECENT DEVELOPMENT IN AUSTRALIAN ASTRONOMY ... Peter Norman  
 Astronomical Society of Victoria

THE MT. JOHN UNIVERSITY OBSERVATORY, THE WORLD'S  
SOUTHERNMOST RESEARCH OBSERVATORY . . . Dr. Carlson R. Chambliss  
Lehigh Valley Amateur Astronomical Society  
American Astronomical Society  
International Astronomical Union

TECHNIQUES FOR CONSTRUCTING A SMALL, PUBLIC  
PLANETARIUM BY AN AMATEUR  
ASTRONOMICAL SOCIETY . . . . . Jerry M. Sherlin  
Omaha Astronomical Society  
Great Plains Planetarium Association  
International Society of Planetarium Educators  
ASP, AAVSO  
(Presented in absentia by Russell Maag)

HOW TO BUILD A SIMPLE HOMEMADE PLANETARIUM  
PROJECTOR . . . . . Tom Traub  
Warren County Amateur Astronomy Club, Inc.

THE SKYVIEW OBSERVATORY . . . . . J. Russell Smith  
Secretary and Book Review Editor of ALPO

A 16" NEWTONIAN TELESCOPE FOR LESS THAN \$1,000 . . Franklin Jordan  
Memphis Astronomical Society

**SESSION C-1**  
Saturday - August 21, 1976  
2:00 p.m. to 5:00 p.m.  
Rohrbach Auditorium - Library

A SYSTEM TO DETERMINE SOLAR COORDINATES DURING  
DIRECT OBSERVATION (FILTERED OBSERVATION) . . . . Harold J. Stelzer  
Chicago Astronomical Society  
AAVSO, ALPO

MORPHOLOGY OF WHITE LIGHT FLARES . . . . . Irene Gordon  
Lehigh Valley Amateur Astronomical Society

SOLAR OBSERVING WITH SMALL TELESCOPES . . . . . Robert A. Yajko  
Kiski Astronomers  
ALPO, AAVSO Solar Division

HOW TO PLAN A SOLAR ECLIPSE EXPEDITION . . . . . Roger W. Tuthill  
AA INC., AL

STARS DO SHINE OVER THE ISLAND OF MANHATTAN . . . John Pazmino  
Amateur Astronomers Association, AAVSO

DEEP SKY PHOTOGRAPHY FROM THE CITY . . . . . Joseph A. Cocozza  
The Rittenhouse Astronomical Society

NEW THEORY OF PLANET FORMATION AND SPACING . . . . C. H. Matson  
Central Florida Astronomical Society

**SESSION C-2**  
Saturday - August 21, 1976  
2:00 p.m. to 5:00 p.m.  
Boehm Science Building - Room 102

ALPO OBSERVING PROGRAM OF LUNAR  
TRANSIENT PHENOMENA . . . . . Winifred S. Cameron  
Goddard Astronomy Club  
ALPO

THE N.C.A. NOVA PATROL PROGRAM . . . . . Daniel Joseph Costanzo  
National Capital Astronomers, Inc.  
AAVSO, ALPO, AMS

INFRARED STUDIES OF MOLECULAR BAND STRENGTHS AND  
AND ISOTOPE RATIOS IN M STARS . . . . . Curtis P. Rinsland  
Lehigh Valley Amateur Astronomical Society  
Graduate Student  
Ohio State University Dept. of Astronomy  
AAVSO

THE PECULIAR ECLIPSING BINARY SYSTEM  
AR LACERTAE . . . . . Dr. Carlson R. Chambliss  
Lehigh Valley Amateur Astronomical Society  
American Astronomical Society  
International Astronomical Union

PHOTOELECTRIC PHOTOMETRY OF RS VULPECULA . . Richard Wasatonic  
Lehigh Valley Amateur Astronomical Society

REDUCTION AND ANALYSIS OF PHOTOELECTRIC OBSERVATIONS  
OF ECLIPSING VARIABLES . . . . . David A. Turnshek  
Department of Astronomy, Villanova University  
Villanova Astronomical Society  
American Astronomical Society

AN UPDATE OF SEB DISTURBANCE ANALYSIS . . . . . Ron Doel  
Dearborn Observatory of Northwestern University  
ALPO

## "200 YEARS OF SOLAR - TERRESTRIAL PHYSICS"

### Dr. Martin A. Pomerantz

Dr. Pomerantz has engaged in research activities in the field of cosmic ray physics which are being conducted at many ground-based stations, aboard ships and aircraft, and with balloons and satellites. Scientific contributions include the discovery of heavy nuclei in the primary cosmic radiation, demonstration of the fact that the general magnetic field of the sun was very much weaker than had previously been believed, and the first direct observation of solar-produced cosmic rays. The current research in solar-terrestrial physics utilizes cosmic rays as "space probes" for studying the electromagnetic properties of the interplanetary medium.

Dr. Martin A. Pomerantz, Director, Bartol Research Foundation of The Franklin Institute; Vice-President, The Franklin Institute; Professor of Physics and Chairman of the Physics Department, Thomas Jefferson University. A.B., Syracuse University, 1937; M.S., University of Pennsylvania, 1939; Ph.D., Temple University, 1951. Doctor of Philosophy honoris causa, Uppsala University, Sweden, 1967. Sc.D., Swarthmore College, 1973. Centennial Gold Medal, Syracuse University, 1970.

## "OUR SUN AND HUMAN SURVIVAL"

### Dr. Emile Benoit

Dr. Benoit is a Professor Emeritus and Senior Research Associate at Columbia University. He was educated at Harvard (B.A., M.A., Ph.D.) and spent ten years in government service as Senior Economist. He has subsequently served as consultant to the U.N. Secretariat, the U.S. Departments of State and Defense, the U.S. Arms Control and Disarmament Agency, and the Asian Development Bank.

Professor Benoit is author of numerous papers, articles, and books concerning world economics, science and their social applicability.

Biographical data may be found in *Who's Who in America*, and *Who's Who in the World*.

## "200 YEARS OF EXPLORING MARS"

### Dan Matlega

Mr. Matlega will speak on "200 Years of Exploring Mars", after which there will be a telephone hookup with Project Viking Control in California. The "telelecture's" intent is to communicate the latest information observed and collated by the teams of NASA'S Project Viking scientists. Dr. George Sands, Director of Project Viking, will head the team of scientists in California; and members of the convention audience will be encouraged to ask questions of these scientists via Mr. Matlega. The answers will be carried through the public address system in Schaeffer Auditorium.

Dan Matlega, Astronomer and Geologist, is associated with NASA as a consultant on Martian geology. He has recently joined the Physics Department of Arizona State University. His diverse background includes a period of time when he served as Director of the Peninsula Planetarium of the Museum of Nature and Science in Newport News, Virginia.

## "200 YEARS OF AMATEUR ASTRONOMY"

### Deborah Jean Warner

Ms. Warner received her B.A. from the University of Chicago (1962) and her M.A. from Harvard University (1963). Since 1970 she has been Associate Curator and Supervisor of the Division of Physical Sciences at the Smithsonian Institution, assuming responsibility for the collection of important information in the fields of astronomy and meteorology.

Ms. Warner's museum exhibit activities include: "1876: A Centennial Exhibition", where she has developed the women's Pavilion and Astronomical sections and has written several catalog entries. Since September 1975 she has been in charge of a team of more than 20 people who are restoring and installing specimens for this exhibit. Other exhibits are "Art and Astronomy: 200 Years Ago"; "Science Prints"; and "Copernicus" a special exhibit held in conjunction with the 500th birthday celebration.

Deborah Jean Warner is author of numerous papers, articles and books concerning historical star atlases, astrophotography, historical opticians and astronomy in antebellum America.

## "STARGAZERS STONE"

### Hubert E. Harber

A special bicentennial planetarium production has been produced, especially for this convention, by the planetarium staff at West Chester State College.

Entitled "Stargazers Stone", it is the story of a Royal Astronomer and a Surveyor who spent the years from 1763 to 1768 in the colonies measuring lengths of degrees longitude and latitude on the earth's surface, using astronomical techniques. One of the lines they measured was the border between Pennsylvania and Maryland, and still bears their names—the Mason-Dixon Line. The program is under the direction of Hubert E. Harber, an Associate Professor at West Chester State College, West Chester, Pennsylvania. Derek Flickinger is the technical advisor and assistant for this production. Admission-free tickets must be acquired at the Registration Desk.

Mr. Harber received his undergraduate degree at Louisiana State University in 1957. He holds masters degrees from University of Colorado (1962) and Brown University (1968). Mr. Harber is presently as Associate Professor of Astronomy Education in the Department of Earth Sciences at West Chester State College. Since 1970 he has been the Program Director of the W.C.S.C. Planetarium. In 1972 he served as consultant to Spitz Laboratories in developing a series of secondary planetarium programs.

## PULPIT ROCK ASTRONOMICAL PARK TOUR

The convention delegates will have an opportunity to visit Pulpit Rock Astronomical Park, a complex consisting of six observatories and a meteor platform, which were built and are maintained by the Lehigh Valley Amateur Astronomical Society.

The tour will be conducted by Ralph Schlegel who is the principal engineer and builder of these buildings and telescopes. Among the instruments to be seen are the recently completed 20" f/15 Cassegrain which is presently being utilized in a photometry program in cooperation with Villanova and the L.V.A.A.S., a 19" R.F.T., a 12" Cassegrain, an 8" refractor, a 10" Newtonian, and several portable mounted telescopes.

Transportation to the Astronomical Park, which is located nine miles north of Kutztown at an altitude of 1,600 feet on the Appalachian Trail, will be by bus to the foot of Pulpit Rock where the delegates will then transfer to a two and one-half ton military troop carrier to complete the trip to the top of the mountain. Use of these vehicles is donated by the 723rd Military Police Company of the Pennsylvania National Guard.

The cost of \$1.50 is to cover commercial bus transportation to Pulpit Rock. Private cars will not be allowed in this area.

## ASTROPHOTOGRAPHY CONTEST

### Sharadin Art Gallery

In conjunction with ASTRO CON '76 the Astronomical League is sponsoring an astrophotography contest. All contestant entries are on exhibit from August 4th through August 22nd in Kutztown State College's Sharadin Art Gallery. This exhibit is open for viewing daily by both convention delegates and the general public.

There will be both black and white and color classes of entry. Each category will have two divisions; deep sky and others (i.e. lunar, planetary, aurora, etc.)

The judges are distinguished photographers and artists, and the entries will be judged for artistic as well as astronomical excellence. Contest judges are:

- Dean Evan Kern, Chairman of Kutztown State College Art Department
- Robert R. Richardson, Sales Manager of Questar Corporation
- George Keene, Eastman Kodak Corporation

Awards for the winners of the Astrophotography Contest will be presented on Sunday afternoon at the ASTRO CON '76 banquet.

### "200 YEARS OF AMATEUR ASTRONOMY IN THE UNITED STATES"

**Mabel Sterns**  
(National Capitol Astronomers)

Commissioned by the Convention Committee, Ms. Sterns has prepared an interesting pictorial and textual display outlining the highlights of amateur astronomy in this country for the last two centuries. Her research has revealed many of the pioneers among amateur astronomers who built telescopes and observatories, made important observations and discoveries, developed or invented optical instruments, and applied photography and spectrography to astronomy.

Also, the display features people who spent their resources of time and money in spreading interest in this age-old science through their magazines and journals; some of the earliest having been founders of our country, and others who had become educators and scientists some were forgotten, and others who have remained illustrious throughout these past two centuries of amateur astronomy in America.

### TELESCOPE FAIR EXHIBIT

An all day display of amateur telescopes will be offered for inspection by registrants at ASTRO CON '76. The Telescope Fair will consist of amateur instruments of all types; however, only homemade components will be judged. Certificates of Entry will be awarded to all who participate and awards for various categories will be presented.

The Telescope Fair Committee is particularly interested in providing an idea exchange among TN's (that is Telescope Nuts). So please stop by on Saturday to look at the instruments and chat with their builders. We're sure that the various telescope makers will be proud to discuss the special features of their scope with you.

### THE KUTZTOWN STATE COLLEGE OBSERVATORY AND PLANETARIUM

The Kutztown State College Observatory was established in 1968. The principal instrument is an 18" f/14.5 Cassegrain reflector, which was built by the Tinsley Optical Company of Torrance, California. This instrument will be available for delegate observing throughout the convention (weather permitting). The telescope is located on the third floor of Grim Hall, and it is situated directly above the planetarium. This location necessitates an unusual arrangement for the pier. Since the pier cannot be run into bedrock, it is mounted in a sandbox, and the sand is capable of damping all extraneous vibrations. The KSC telescope is equipped with a photoelectric photometer as well as several cameras. Research projects undertaken with this instrument have included photoelectric photometry of variable stars and photographic studies of comets.

The KSC Planetarium has a Spitz A3P projector and a dome with a diameter of 34 feet. The seating capacity is 103. The planetarium was installed in the same year as the observatory. In addition to its use as a teaching aid in the astronomy courses at KSC, the planetarium is used extensively for various school groups. During the course of a school year over 3,000 pupils attend planetarium shows at KSC.

At present there are two astronomers at Kutztown State College, Dr. C.R. Chambliss and Mr. John Loomis. A total of seven different courses in astronomy are presently being

taught. These include a basic one-semester course for non-science majors, a two-semester course for science majors, and special courses in planetarium usage, observational techniques, and astrophysics.

John Loomis has been on the faculty of Kutztown State College since 1974 and is also Director of the KSC Planetarium. He is a graduate of Indiana State University, and he received an M.S. degree in Astronomy from the University of Massachusetts in 1973. The planetarium show which he is presenting, "The Origin of the Solar System", is one of several which he has prepared for public showings.

### KUTZTOWN STATE COLLEGE

Kutztown State College is situated at the western edge of Kutztown, Pennsylvania, a town of 4,500 people, midway between the cities of Allentown and Reading. The college presently has a total enrollment of 5,500 students and is one of the fourteen state colleges in Pennsylvania. It is primarily supported by state funds, and the majority of the students at KSC are from Pennsylvania.

KSC was founded as the Keystone Normal School in the year 1866. In 1926 its name was changed to Kutztown State Teacher's College, and in 1960 it was further changed to the present Kutztown State College. Since 1960 there has been a rapid expansion at the college in terms of enrollments, physical facilities, and the variety of programs offered. A substantial percentage of the students enrolled at KSC are currently in liberal arts and science programs rather than in education, which has been the traditional mainstay at KSC. The college has long been known for its programs in fine arts and art education, and the recent years have seen the development of many new programs in a wide variety of disciplines. Master's degrees are now offered in several fields as well as A.B. and B.S. degrees.

The grounds of KSC cover 320 acres, and many of the buildings have been erected since 1960. A classroom building for mathematics, English, and speech and theatre, and a building for administrative offices are presently under construction. Among the more distinctive buildings on campus are the Grim Science Building with its observatory and planetarium, the Rickenbach Research-Learning Center with a TV studio, the Rohrbach Library which contains a Russian Culture Center, and Keystone Hall with its extensive facilities for sports and physical education.

Further information about Kutztown State College is available upon request.

### LEHIGH VALLEY AMATEUR ASTRONOMICAL SOCIETY, INC.

The L.V.A.A.S., based out of Allentown, Pennsylvania, is a non-profit, educational organization comprised of 100 amateur astronomers. Founded in 1957, the society owns and operates administrative facilities on South Mountain in Allentown and observing facilities on Pulpit Rock near Hamburg, Pennsylvania.

The South Mountain site consists of a planetarium-meeting room, library, workshop and domed observatory housing a 6" refractor. Pulpit Rock Astronomical Park, at 1,600 feet altitude, is the site of six society observatories and a meteor observing platform. For more information on this, please see Pulpit Rock Tour.

The L.V.A.A.S. offers programs to fill most every amateur's needs, and also conducts planetarium shows and courses in astronomy for the scientific and cultural benefit of the general public of the Lehigh Valley.

#### Officers

- Director ..... Kenneth H. Mohr, Jr.
- Assistant Director ..... Mildred Guss
- Secretary ..... Robert K. Bohm
- Treasurer ..... Richard F. Cressman