Hipparchos

The Hellenic Astronomical Society Newsletter

Volume 1, Issue 7, Year 3 **December 1999**

Message from the President

The New Millennium is anxiously waiting for mankind to take the final gentle step and cross the gate of the new era. Dreams for a united and friendly world, perspectives for a better future, pictures of new relations between people and nations and expectations of more comfortable standards of living are but a few among many desires that are carefully carried through the gate and laid in the hands of the Faithful, the power of Science and the ability of Technology.

The expiring Millennium is looking back, trying to summarise its achievements and hand them over to future generations. I wonder what people of the 25th or the 30th Century will remember as the most prominent achievement of the 20th Century. Will it be the advances in quantum and relativistic physics, air-travel and space exploration, the first human step on the Moon, the invention of radio and television, our escape from the heliocentric universe, the first nuclear reaction, the two World Wars, the production of antibiotics, the decoding of DNA, tissue transplantation, the explosion of computing power? I believe that all the above items are very important and have marked the evolution of the 20th Century. However, if we suppress prejudices and take a global view of our physical and social environment, all these will have melted away in a few hundred years time. What will appear as most striking about the 20th Century will be the birth of ***Global Consciousness****.*

For the first time in History, large fractions of Humanity, despite its exponential growth, experienced the same events, shared the same emotions at the same time.

Global communication and transportation has made this possible. The 20th Century was the first Century, when a sizeable fraction of human beings became aware of their similarities rather than their differences. Furthermore, Astronomy burned into our minds the image of the tiny planet we all share. A little world floating like a jewel against the dark emptiness and the vastness of space.

As intelligent humans, even more so: as scientists, it is our duty to inform the world about our findings and concentrate our efforts towards global peace and happiness.

Events like the 4th Hellenic Astronomical Conference, held in Samos last September, certainly contribute remarkably towards such aims and visions. During the three days of scientific meetings and cultural events, we came closer together and when, later, we

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4th Hellenic Astronomical Conference

September 16-18, 1999
Samos, Greece

The fourth Hellenic Astronomical Conference took place at the island of Samos, between September 16 and 18, 1999. The Conference was organised by the Hellenic Astronomical Society under the auspices of the University of the Aegean (Department of Mathematics and Department of Mediterranean Studies).

About 120 participants from 11 countries exchanged their scientific expertise and secured their social bonds during a three-day conference that took place at the hotel *Dorissa Village* in Pythagorion, a resort suburb about 10 km SW from Karlovassi.

4th Hellenic Astronomical Conference
INVITED SPEAKERS

Rudolf Dvorak, Vienna, Austria
Bengt Hultqvist, Sweden
Menas Kafatos, George Mason University, USA
Nikos Prantzos, IAP, Paris, France

The inaugural ceremony was attended by the mayor of the island, representatives of the Ministry of the Aegean and a large number of other public and scientific representatives. The scientific sessions were divided into six *sub-*

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The Hellenic Astronomical Society Prize for the best Ph.D. of the year

During the 4th General Assembly of the Hellenic Astronomical Society that took place at the island of Samos last September, Dr. Markos Georganopoulos received the 1998 prize for the *best Ph.D. in Astronomy*. The prize was established by our Society in November 1997.

The prize was presented to Dr. Georganopoulos by the President of Hel.A.S. during a solemn ceremony immediately after the 14th General Assembly of the Society.

Dr. Georganopoulos received his Ph.D. last spring from the Department of Physics at Boston University, USA under the supervision of Professor Alan Marscher. His work involved theoretical models of Active Galactic Nuclei. Presently he works at the Max-Planck-Institót fór Astronomie at Heidelberg, Germany.

I take the opportunity to remind the members of the Society that the prize is awarded annually to active members of the *Society,* who have successfully defended their PhD thesis during the calendar year of the award. For 1999, the Council of *Hel.A.S.* has decided to offer the sum of 120.000 drachmas. The recipient will be selected by the Council. All members of the *Society* and other colleagues (PhD supervisors in particular) are strongly encouraged to bring to the attention of the Council of *Hel.A.S.* any candidate of this year's prize, by sending details to the Secretary of *Hel.A.S.*

Harry Varvoglis
Secretary of Hel.A.S.

The new Technology Museum and Science Center of Thessaloniki

The plans of the new Technology Museum and Science Center of Thessaloniki were presented in a press conference, held in Thessaloniki on November 23, 1999. Dr. P. Tzonos Professor in the Dept. of Architecture of the University of Thessaloniki and a spokesman for the french-greek team of architects who designed the new facility, presented the plans to a panel, chaired by the President of the Technical Museum of Thessaloniki, Honorary Professor N. Economou.

The new Center will comprise of a 250-seat Omnimax Cosmotheater, a 150-seat digital planetarium and laser show, an 18-seat virtual reality Simulator, a Conference auditorium, an exhibition area and a Technopark area of interactive exhibits. The total cost of the project is 6 billion drachmas; approximately two thirds of this sum will be paid by the European Bank of Investment and the rest by the Greek Ministry of National Economy. The center will be built in a 48 000 m^2 lot in Thermi, a suburb of Thessaloniki, and will be operational by mid-2002. In the panel were present the Deputy Minister of National Economy Chr. Pachtas, the Secretary of the District of Central Macedonia P. Sofianos, the prefect of Thessaloniki K. Papadopoulos and the mayor of Thermi Th. Papadopoulos.

Harry Varvoglis
Secretary of Hel.A.S.

Are you a Member of Hel.A.S.? Have you paid your annual subscription?

New members of HEL.A.S.

Since our last report on the membership of Hel.A.S. (Hipparchos **1**, 3, 1997), thirty-three (33) new members have been elected during the General Assemblies of the Society, in accordance with our Constitution.

Sixteen (16) members were elected as Ordinary members, sixteen (16) as Junior members and 1 as Associate member. Since then, twenty-four (24) Junior members obtained their Ph.D. and were promoted to Ordinary members. Meanwhile two Ordinary members (Dr. A. Michalitsianos and Professor M. Papagiannis) were deceased and two Ordinary members (Dr. Chr. Papageorgiou and Dr. S. Maravelias) resigned. The overall membership of the Society has, therefore, grown to 213 (173 Ordinary members, 38 Junior members and 2 Associate member).

The 33 new members were elected during the 10th, 12th and 14th General Assemblies and are listed below. Small changes may have occurred since their election:

10th General Assembly July 5, 1997

Ordinary Members (5/7/1997)

1) Angelopoulos Vassilios, UC Berkeley, USA
2) Chilaris Alexandros, Melissia
3) Dallas Efthymios, Varkiza
4) Dara Eleni, Academy of Athens
5) Dalas Efthymios, MPIfA, Heidelberg, Germany
6) Mavromatakis Fotios, University of Crete
7) Moyssidis Pavlos, National Technical University of Athens
8) Papafilippou Yannis, INFN-LNL, Italy
9) Sauty Christophe, Observatoire de Paris, France
10) Tritakis Vassilios, Academy of Athens
11) Vassilaki Antonia, University of Athens

Junior Members (5/7/1997)

1) Barziv Orly, University of Amsterdam
2) Bratsolis Emmanouil, National Observatory of Athens
3) Christopoulou Evgenia, University of Athens
4) Madi Aikaterini, University of Athens
5) Moustakas Leonidas, UC Berkeley, USA
6) Paschos Paschalis, University of Illinois, USA
7) Sidiropoulos Nikolaos, University of Thrace
8) Stamatellos Dimitrios, University of Athens
9) Stavridis Adamantios, University of Thessaloniki
10) Tsiganis Kleomenis, University of Thessaloniki
11) Vassilakos Spyridon, University of Athens

12th General Assembly June 6, 1998

Ordinary Members (6/6/1998)

1) Petkaki Panagiota, Imperial College, UK
2) Zachariadis Theodosios, Academy of Athens

Junior Members (6/6/1998)

1) Hadjimenaoglou Evanthia, Toulouse, France
2) Kitsionas Spyridon, Cardiff University, UK

Associate Members (6/6/1998)

1) Mavrommatis Konstantinos, Astronomical Society of Volos

14th General Assembly September 18, 1999

Ordinary Members (18/9/1999)

1) Stergioulas Nikolaos, MPIfG, AEI, Potsdam, Germany
2) Tziotziou Konstantinos, Observatoire de Paris, France
3) Vlachakis Nektarios, University of Crete

Junior Members (18/9/1999)

1) Karastergiou Aristidis, MPIfR Bonn, Germany
2) Karidis Aristidis, NRAL Jodrell Bank, U.K.
3) Louridas Alexios, NRAL Jodrell Bank, U.K.

As mentioned above, 28 Junior members obtained their Ph.D. degree since they were elected. Therefore, they have been promoted to the ordinary membership status. In alphabetical order these members are:

Junior memebrs that have been promoted to Ordinary memebrs

1) Agapitou Vassiliki
2) Chatzichristou Eleni
3) Drillia Georgia-Athanasia
4) Efthimiopoulos Christos
5) Georganopoulos Markos
6) Gizani Nectaria
7) Hadjifotinou Aekaterini
8) Harsoula Maria
9) Kakouris Alexandros
10) Kalogera Vassiliki
11) Kleidis Konstantinos
12) Kolokotronis Vaggelis
13) Maravelias Stergios
14) Moustakas Leonidas
15) Nintos Alexandros
16) Papathanassiou Harikleia
17) Polygiannakis Ioannis
18) Psaltis Demetrios
19) Savopulos Michail
20) Siopis Christos
21) Skokos Charalambos
22) Vourlidas Angelos
23) Xilouris Emmanouel
24) Zois Ioannis

THE NEUTRON STAR - BLACK HOLE CONNECTION

A NATO Advanced Study Institute

Set against the background of beautiful Mirabello Bay, astronomers from fourteen countries met at Elounda, Crete in the period 7-18 June, to debate some of the most compelling issues of present day astrophysics.

Neutron stars and black holes have been at the forefront of astrophysics for over thirty years. As recently as ten years ago it was still being debated whether galactic stellar-mass black holes existed or not. It is now generally accepted that many (possibly a thousand) stellar-mass black holes - most of them still undetected- lie in low mass X-ray binary (LMXB) systems; a few of them are detected every year as X-ray or gamma-ray transients. These objects are more massive than 3 $M_{\odot}$, the maximum possible mass for a neutron star, and show none of the telltale signs of neutron stars, such as X-ray bursts and X-ray pulsations.

It is quite remarkable that all LMXBs display a similar temporal and spectral behaviour, independently of whether the accreting compact object is a neutron star or a black hole. A broad debate on these similarities and differences naturally constituted one of the main focal points during the Elounda meeting. Evidence on these aspects has been forthcoming from the Compton Gamma-ray Observatory (CGRO), the ROSAT and ASCA satellites, the Rossi X-Ray Timing Explorer (RXTE), and from the Beppo-SAX Observatory

. Several reports zeroed in onto the very rich phenomenology of the transient X-ray source GRS 1915+105, a black hole, also found to be a micro-quasar expelling superluminal plasma jets at regular intervals. This source also displays an interesting pattern of fast spectral and time variations, and has been singled out as a unique prototype for the study of accretion-disk instabilities, possibly at work in other accreting black holes. An observing run of this source with RXTE was actually taking place while the meeting was in progress, and a direct internet connection to the experiment enabled observer Tomaso Belloni to obtain the latest light curves and variability patterns. There are indications that we are seeing emission from very close to the black hole event horizon, possibly at the location of the last stable orbit, and excitement over the possibility of observing direct manifestations of general relativity in this and related objects is quite strong.

Predictably, the mysterious gamma ray bursts (GRB), and the recently discovered magnetars added two more important focal points to the Elounda meeting. Recent success in following up GRB afterglows has led to identifications relating these most powerful explosions to faint galaxies at cosmological distances. It is theorised that these events could be the result of catastrophic mergers of neutron star binaries, or neutron star - black hole binaries. Mechanisms leading to such gigantic coalescence events were reviewed at the meeting.

GRBs are thought to be catastrophic, one-time-only events, resulting in the total disruption of the initial system. Contrary to these, the distinct class of the so called soft gamma repeaters (SGRs), numbering only four sources located in our Galaxy and in the near-by Large Magelanic Cloud, do recur in sporadic eruptions displaying very soft gamma ray spectra. These objects have been linked to magnetic neutron stars with rather long, 5 to 10 second spin periods, and are typically linked to 10^4 year old supernova remnants. Their long spin periods along with their measured rates of spin decay point to ultra-strong magnetic fields of the order of 10^{15} Gauss. Are these objects related to another class of low luminosity - long period X-ray pulsars, known as anomalous X-ray pulsars? This is still a point of detailed investigation and debate involving theory and observation.

These, and a multitude of related issues were reviewed, analysed, and debated in Elounda:

- Can magnetospheric beat frequency models explain some of the neutron star QPOs?
- QPOs were recently detected during thermonuclear X-ray burst events in accreting neutron stars. Do these quasiperiodicities relate to the propagation velocity of burning fronts as they move across the neutron star's surface?
- How is one to interpret the evident similarities of accreting neutron stars and black holes in low mass X-ray binaries?
- Do NS magnetic fields evolve?
- Do we see the surface thermal emission of isolated neutron stars?
- Do we observe all the neutron stars predicted by the current counts of supernova events in our Galaxy?
- Which evolutionary scenarios give rise to NS and BH binary systems?
- Could a sub-class of GRBs be due to the catastrophic release of the rotational energy of the neutron star in some odd, accreting low mass X-ray binaries in distant galaxies?

All these debates certainly serve in refocusing the observing strategies to be followed with the new and powerful Chandra and XMM observatories awaiting launch within this summer. The Elounda meeting has thus offered an excellent opportunity for reviewing the capabilities of these and other coming space-borne missions.

One characteristic that made this event memorable to the participants was the special effort lecturers and speakers placed in preserving a broad tutorial character in their presentations. This aspect is especially important in meetings bringing together researchers with very disparate backgrounds, as it serves in unifying the audience, and furthering the cross-fertilisation of ideas.

Chryssa Kouveliotou,
Jan van Paradijs[†],
Joseph Ventura

More details on this meeting (program, list of participants) may be found in the conference web page:

http://www.mitos.com.gr/conf/n_starASI99

[†]Jan van Paradijs passed peacefully away on November 2.

THE INSTITUTE OF SPACE APPLICATIONS AND REMOTE SENSING OF THE NATIONAL OBSERVATORY OF ATHENS

Anastasios Anastasiadis
(anastasi@creator.space.noa.gr)

The activities of the Institute encompass a wide area in Space Research and Applications. Its research disciplines are broadly divided into the following four areas: (i) Solar-Terrestrial, (ii) Telecommunications, (iii) Ionosphere and (iv) Remote Sensing. Additional activities include: (a) The systematic collection and processing of data derived from observations made either from the earth or space, (b) The performance of autonomous studies in other specific subjects of space research and applications, (c) Education and (d) Rendering of specialized services.

SOLAR-TERRESTRIAL RESEARCH

The activities of the Solar-Terrestrial Research (Coupling) Group of ISARS focus on solar physics, interplanetary disturbances, magnetospheric dynamic proesses and impacts on the terrestrial atmosphere. The Group is particularly active in investigations of: Such investigations are achieved by means of:

- Solar atmosphere dynamics
- Charged particle acceleration mechanisms
- Space magnetic storms and space weather
- Magnetosphere-ionosphere coupling
- Storm-time ring current dynamics.

Such investigations are achieved by:

- Data processing, analysis and interpretation of spacecraft data
- Development of modelling software for the implementation of mission objectives
- Computer simulations of basic physical processes.

Researchers of ISARS have been participating in several space missions under the Co-Investigator or Group Member status. Active co-operation exists with a number of research institutes in Europe and USA.

A clear objective and plan for future endeavours of the Space Research group is also the detailed investigation and interpretation of dynamic chains of events observed at the Sun, interplanetary space, magnetosphere and terrestrial atmosphere and their cause-and-effect relationship.

TELECOMMUNICATIONS RESEARCH

The main thrust of the R&D activities of the Telecommunications Group deal with state-of-the-art satellite and terrestrial wireless telecommunication systems and networks for both fixed and mobile/portable applications. Current emphasis includes projects related to future PCS/UMTS 3rd generation systems for multimedia applications.

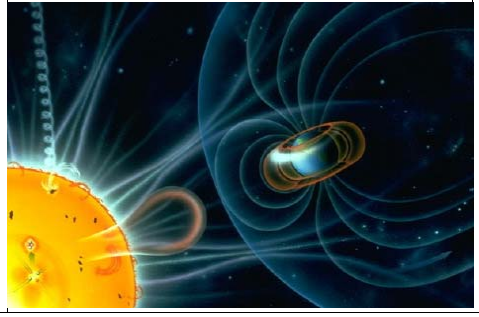
The group has been and/or is currently involved in several projects:

Satellite Systems
- Ka-band (20/30 GHz) GEOs for mobile voice/data system applications
- LEOs/MEOs satellite networks for mobile multimedia system applications

Terrestrial Systems
- Smart Antennas for PCS/UMTS systems
- HF (2MHz) Radio Systems
- Multicarrier and OFDM systems

Satellite/Terrestrial Systems
- Transceiver structures for interference channels
- Channel measurements, modelling and simulation
- CDMA and TDMA capacities
- HDTV transmission over satellite and cable channels.

Through the participation in the above and other related R&D projects, the group has gained extensive experience in the analysis, simulation and, in certain cases, actual implementation of virtually any advanced wireless satellite and terrestrial telecommunication system.



IONOSPHERIC RESEARCH

A large part of the Ionospheric Group's research and development concentrates on the study of the physical processes of the Earth's ionosphere, using experimental data from ground based instruments operated by the ISARS and also satellite and ground observations from the worldwide network of ionospheric stations.

The main activities include:

- Research studies of the ionospheric impact on magnetosphere-ionosphere coupling
- Development of regional and large-scale models of the ionosphere
- Nowcasting and forecasting of ionospheric space weather
- Prediction of the operative parameters in HF ionospheric radio communications

A major research project undertaken by the Ionospheric Group, which is now in progress, concerns the installation of a very advanced digital high frequency Doppler radar system, for probing the ionosphere. The operation of this fully automated digisonde will give us the possibility to join the European Network of Ionospheric Stations for real-time mapping of the Earth's ionosphere and to make a significant contribution in the short-term ionospheric prediction over South Europe and the East part of the Mediterranean Sea.

REMOTE SENSING RESEARCH

The primary mission of the Earth Observation group is to collect and fruitfully exploit space-derived data and provide information and services to citizens and decision makers interested to know about the state of Earth's environment and its dynamics.

In the domain of satellite data collection and distribution, the ISARS operates two image reception stations for the NOAA and Meteosat satellites.

The collected data are systematically processed and distributed to the user's community by using commercial and in-house developed S/W for image processing, archiving and delivery. Current research activities includes:

- Monitoring and study of natural resources and development of remote sensing systems capable to support water management in the Mediterranean.
- Detection, localisation and monitoring of air pollution load and transport over big cities and industrial zones via satellite observation systems, modelling and in-situ measurements.
- Development of advanced image analysis techniques to process satellite imagery acquired by high spatial resolution sensors. In particular, development of methodologies that permit the integration of this data in urban planning and land use mapping.
- Use of remote sensing techniques for early warning, risk assessment and mitigation of natural hazards, studied in parallel and evaluated through specific experiments.
- Potential of SAR interferometry techniques to detect very small changes of the Earth's crust due to volcanic and seismic activity.

Detailed information on the research activities of the members of the ISARS can be found at:

http://www.space.noa.gr

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jects, each covering a well-defined area of Astronomy:

4th Hellenic Astronomical Conference
MAJOR AREAS

- **Dynamical Astronomy and Celestial Mechanics**
- **Solar, Planetary and Space Physics**
- **Stellar Astrophysics**
- **The Galaxy and other galaxies**
- **High Energy Astrophysics**
- **Cosmology and Relativity**
- **Infrastructure of Astronomy in Greece**
- **History of Astronomy**

The Local and Scientific Organising Committees worked under critical conditions to fulfil their tasks.

Finally, most of the problems were solved and the participants enjoyed a memorable conference.

J. Seimenis

4th Hellenic Astronomical Conference
THE ORGANISING COMMITTEES

THE LOCAL COMMITTEE

J. Seimenis (Chairman),
I. Liritzis,
X. Moussas,
P. Niarchos,
N. Soulakellis.

THE SCIENTIFIC COMMIITTEE

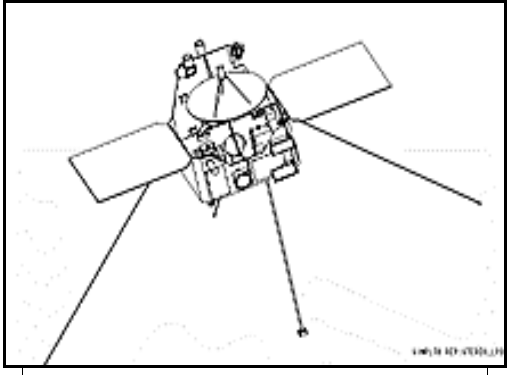
J. Seiradakis (Thessaloniki, Chairman),
G. Antonakopoulos (Patras),
E. Kontizas (Athens),
N. Kylafis (Crete),
E. Livaniou (Athens),
X. Moussas (Athens),
P. Niarchos (Athens),
J. Seimenis (Aegean),
V. Tritakis (Athens),
E. Tsikoudi (Ioannina),
H. Varvoglis (Thessaloniki).

Greek participation to the STEREO Mission

X. Moussas

In 2004 a new two spacecraft mission will leave the Earth to study the Sun and the inner heliosphere in 3D. The Solar TErrestrial RElations Observatory (STEREO) mission is the third in the series of the Solar-Terrestrial Probes (STP) and it is dedicated to the study of the Solar Terrestrial relations and Space Weather. It belongs to the International Solar-Terrestrial Physics (ISTP) program. The two spacecraft will have prograde and retrograde trajectories and will observe the Sun from two different angles.

The primary goal is to advance the understanding of the three-dimensional structure of the Sun's corona, especially regarding the origin of coronal mass ejections (CME's), their evolution in the interplanetary medium and the dynamic coupling between CME's and space weather. CME's constitute the most severe interplanetary disturbances and cause the more intense geomagnetic storms as well as the largest solar energetic particle events.



On board STEREO there are four experiments: an EUV imager, a particle and a plasma experiment and SWAVES, a Radio Burst Tracker, which will monitor the Sun in a frequency range of ~15 MHz to ~30 kHz. SWAVES experiments on board both spacecraft will track CME and shocks from the Sun to the Earth using triangulation. The principal investigator of SWAVES is Dr Jean-Louis Bougeret, Departement Spaciale, Observatoire de Paris. The University of Athens participates in SWAVES with Prof. Costas Caroubalos (co-investigator) and Xenophon Moussas.

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dispersed to our homes and countries, the World, I hope, became a bit more united. I would agree that the conference could have been a bit better organised. Unfortunately, at the last moment a natural disaster that struck Athens prohibited the participation of a few colleagues, among whom members of the Local Organising Committee. An important member of the LOC, was, unexpectedly, called up in the ... army for training. Despite all this, the chairman of the LOC, Dr. J. Seimenis, did his best during the conference to ease the situation. I hope that by now he has caught up with the numerous sleepless nights that he endured during the conference!

During the Samos conference, the first Hel.A.S. price for the best Ph.D. of the year was presented to Dr. Markos Georganopoulos. Markos delivered an excellent talk about his work, during a solemn ceremony.

The Zeiss representative, Dr. Helgard Naumann, informed us about the state of making of the new optical telescope of the National Observatory of Athens to be built on Mt. Chelmos. We all are very excited to celebrate the inauguration of the 2.3-m telescope at a height of 2.3 km, with a 2.3-m pizza, as Dr. Naumann promised!

Many colleagues commented on the success of the electronic Newsletter of the Society, that Professor H. Varvoglis and Dr. V. Charmandaris issue every month. I would like to express my sincere thanks to both. Finally, I would like to take the opportunity to ask all members to actively participate in the running of our Society. Your comments, current activities and news are most welcome by the editors of Hipparchos and the E-Newsletter.

I wish you a gentle and happy entrance to the New Millennium.

The President of Hel. A.S.,
J.H. Seiradakis

Exploring the web with Hipparchos

Contrary to the theme presented in the previous issue of Hipparchos, in this issue we address the burning question: "*How about getting my hands into some real data?*". Especially how about data I did not have to write a proposal for or spend cloudy nights collecting them on the telescope located in an isolated mountain top...

Well, there is good news, since loads of publicly accessible data in almost all areas of observational astrophysics are available. Here is a list of five very interesting sites from where one could start.

http://archive.stsci.edu/HDA/

The Hubble Space Telescope Data Archive has all observations made by HST over the past nine years. It includes a variety of both multi-wavelength imaging and spectra on more than 20000 nearby, galactic and extra-galactic targets. All observations are available to any astronomer a year after they have been performed. The data in the archive are "nearly" publication quality and little extra work is needed to retrieve them and perform a bit of reduction.

http://www.nrao.edu/vla/html/VLApastobs.shtml

All radio continuum and line observations made by the Very Large Array over the past 19 years. Only raw data are available and knowledge of basic concepts of radio astronomy as well as of a radio data reduction package (such as AIPS or GIPSY) is essential.

http://skyview.gsfc.nasa.gov/

SkyView is a Virtual Observatory on the Net. Astronomers can generate images of any portion of the sky based on available observations at wavelengths in all regimes from radio to gamma-rays. The images are in ready to use FITS format.

http://nedwww.ipac.caltech.edu/

NED - the NASA Extragalactic Database contains references and basic photometry/astrometry data on practically all extra-galactic objects that have ever been published. The web interface is user friendly and the ability to create plots/maps out of data on the fly a plus.

http://cdsweb.u-strasbg.fr/Simbad.html

SIMBAD is similar to NED but with an emphasis given to galactic objects (such as stars and nebulae). It brings together basic data, cross-identifications, observational measurements and bibliography.

Vassilis Charmandaris
(vassilis@astro.cornell.edu)

A New Site for the 2.3m telescope of the National Observatory of Athens

E. Kontizas
Astronomical Institute, National Observatory of Athens

The new 2.3m telescope of the National Observatory of Athens (see *Hipparchos*, **6**, p.4, 1999) will be installed in a new, hopefully, much better site than Kryoneri-ion.

The PI for the telescope project is Dr. E. Kontizas and the PI for the telescope building is Dr. P. Hantzios.

The new site was announced during a special session of the 4th Hellenic Astronomical Conference, held at Samos on the 18th of September 1999. At the same event its name, "*Aristarchos",* was revealed. In order to celebrate the occasion, *CARL ZEISS* and the *National Observatory of Athens* offered a delicious dinner to all participants.

The new site was chosen following the recommendations of the external committee of the workshop *Astronomy 2000+*, (Yervant Terzian (chair), Menas Kafatos (secretary), Lia Athanassoula, Demos Kazanas, Chryssa Kouveliotou and Stamatis Krimigis). Our effort to find a better site for the new telescope was successful and the new telescope will be installed at Mt. Chelmos.

Mt. Chelmos (Aroaneia) is in Peloponnese (E 22° 12' 32.5'', N 37° 59' 35.3'') and the telescope will be located at Neraidorachi at an altitude of 2340 meters. Originally the place was pointed out by Dr. D. Synachopoulos, who also carried out most of the site-seeing tests. The selected location is very near the fountain of Styx, where Thetis, the mother of the famous hero Achilles, plunged him in infancy to make him invulnerable. The site is very dark, one of the darkest in continental Europe. During winter, approximately half of the cloudy nights the top of the mountain is above the clouds and this yields a great number of clear nights yearly. In addition, very often it is above the inversion layer of the atmosphere and this yields excellent astronomical images. Indeed, a first series of image motion measurements yielded values between 0.3 arcsec and 1.5 arcsec with median value 0.7 arcsec. This site profits from the existing infrastructure provided by the nearby ski center, which is operated by the city of Kalavryta. At this site the new telescope will become a world class instrument. It is believed to be able to observe in the infrared too. Moreover, at this location there is no light pollution at all, since all major cities are far away and well hidden by the intervening mountains.

As president of the Greek National Committee for Astronomy I am extremely proud to see the progress of this significant project and I hope the whole Greek Astronomical Community will take full advantage of the new facility.

THE BARBANIS PRIZE

Marios Kabakoglou was awarded the *1999 Barbanis-Prize* during a solemn ceremony that took place at the Department of Physics of the University of Thessaloniki in November 1999. Marios will be graduating next year. His aim is to continue with post-graduate studies in Astronomy. The Council of HEL.A.S. wishes him a successful career in Astronomy

Meetings of interest to Hel.A.S. Members
(Up to August 2000)

16-20 May 2000: *"Asteroids, Meteorites, Impacts and their Consequences, AMICO 2000"* Noerdlingen, Bavaria, Germany. Contact: Michael Schieber, Rieskrater Museum, Eugene Shoemaker Platz 1, Noerdlingen, Germany, D-86720 http://ecf.hq.eso.org/~ralbrech/amico/E-Mail rieskratermuseum.noerdlingen@donau-ries.de

2**9 May-3 June 2000**: "*European Astronomy at the Turn of the Millennium (JENAM 2000)*: 9th European and 5th Euro-Asian Astronomical Society Conference. Moscow, Russia. Contact: Dr. A.M. Cherepaschuk, J*ENAM-2000* Sternberg Astronomical Institute, 13,Universitetskij prosp., 119899 Moscow, Russia. http://www.inasan.rssi.ru/INASAN/JENAM/ E-Mail: jenam@sai.msu.su

19-29 June 2000: NATO ASI, on "*Space Storms and Space Weather Hazards"*, Crete, Greece. Contact: Dr. A. Anastasiadis, National Observatory of Athens, Institute for Space Applications and Remote Sensing, Metaxa and Vas. Pavlou Str., Palea Penteli , GR- 15236 GREECE. http://sat2.space.noa.gr/~daglis/asi2000.html. E-mail: daglis@creator.space.noa.gr or anastasi@creator.space.noa.gr

7-19 August 2000: "X*XIV General Assembly of the International Astronomical Union"* Manchester, UK. Contact: IAU-UAI Secretariat, 98bis, Bd. Arago. F - 75014 Paris France http://www.iau.org E-Mail: iau@iau.org