Joint European and National Astronomical Meeting for 1997

J E N A M - 9 7

6th European and 3rd Hellenic Astronomical Society Conference

2 – 5 July 1997, Thessaloniki, Greece

ORAL PRESENTATIONS
in Parallel Sessions

Dynamical Astronomy

Wednesday, July 2, 1997 (12:30 - 13:30) **Room B**
(Chair: G. Contopoulos)

12:30-13:15	E. Athanassoula (Inv.)	"Galactic Dynamics and N-body simulations"
13:15-13:30	P. Grosbol et al.	"On Density Waves in Spiral Galaxies"

Wednesday, July 2, 1997 (17:00 - 19:00) **Room B**
(Chair: J. Hadjidemetriou)

17:00-17:15	Y. Papaphilippou	"Global dynamics and diffusion in triaxial galactic models"
17:15-17:30	E. Grousouzakou et al.	"Distribution of periodic orbits in 2-D Hamiltonian systems"
17:30-17:45	C. Skokos	"Formal integrals of one–dimensional time dependent Hamiltonians"
17:45-18:00	C. Efthymiopoulos et al.	"Stickiness, Cantori and lobe dynamics"
18:00-18:15	E.M. Pittich et al.	"Long-period perturbations of third and fourth orders in the nonrestricted three-body problem"
18:15-18:30	T.J. Kalvouridis	"Parametric variation of the equilibrium configurations in Whipple's problem"
18:30-18:45	K. Tsiganis et al.	"Lyapunov Numbers and Stochastic Layer Widths in a Perturbed Pendulum"
18:45-19:00		Discussion

Saturday, July 5, 1997 (09:300 - 11:00) **Room D**
(Chair: P. Grosbol)

09:30-09:45	A.V. Myshev et al.	"Monte-Carlo simulation of dynamics system with stochastic parameters in the Solar system"
09:45-10:00	S.I. Ipatov	"Migration of objects to the Earth from the Edgeworth-Kuiper belt"

Dynamical Astronomy (cont.)

10:00-10:15	N.V. Kulikova et al.	"Destruction of small bodies of the Solar System: stochastic modeling"
10:15-10:30	A.K. Markina	"Nature of hyperbolic meteors"
10:30-10:45	E.W. Elst	"Some practical remarks on the accuracy of preliminary orbits from newly discovered asteroids"
10:45-11:00		Discussion

Solar Physics

Thursday, July 3, 1997 (17:00 - 19:00) **Room B**
(Chair: E. Antonucci)

17:00-17:30	S. Poedts et al. (Inv.)	"MHD wave heating of coronal loops"
17:30-18:00	G. Noci (Inv.)	"The quit corona and the regular solar wind"
18:00-18:10	K. Tsinganos et al.	"Time-dependent simulations of the solar & protosolar wind"
18:10-18:20	N.A. Lotova et al.	"Critical point of the solar wind changes in the 11-year solar cycle"
18:20-18:30	M.K. Georgoulis et al.	"Statistical Properties of Magnetic Activity in the Solar Corona"
18:30-18:40	A. Anastasiadis	"Electron Acceleration by DC Electric Fields in Solar Flares"
18:40-18:50	P. Battinelli et al.	"The Correlation between Extreme Meteorological Events and the Solar Activity"
18:50-19:00	C.S. Zerefos	"Long-term changes of solar UV-B radiation at ground level"

Friday, July 4, 1997 (09:30 - 10:30) **Room D**
(Chair: K. Tsiganos)

09:30-10:00	S.P. Plunkett (Inv.)	"Multiwavelength Observations of Coronal Mass Ejections from SOHO"
10:00-10:10	E. Antonucci et al.	"Line broadening of HI Ly α 1216 and O VI 1032 lines in regions of open magnetic field lines in the extended corona"
10:10-10:20	V.N. Krivodubskij	"On the period of the solar dynamo-cycle"
10:20-10:30	A.D. Pataraya et al.	"Excitation of the rossby waves due to the triple polarity reversal of the magnetic field"

Space and Planetary Physics and Astronomy

Wednesday, July 2, 1997 (12:30 - 13:30) Room C

Magnetospheres (Chair: E.T. Sarris)

12:30-12:50	D.N. Baker (Inv.)	"Relativistic Particle Acceleration in the Earth's Magnetosphere"
12:50-13:10	G. Gloeckler (Inv.)	"Pickup Ions in the Heliosphere"
13:10-13:20	G.Anagnostopoulos et al.	"Simultaneous Detection of Ion Spectra Evolution within Earths's Magnetosphere and its Environment: Implications to the Inverse Velocity Dispersion Upstream Phenomenon"
13:20-13:30	G.P.Pavlos et al.	"Nonlinear processes in the Earth's Magnetosphere"

Wednesday, July 2, 1997 (17:00 - 19:00) Room C

Jovian Magnetosphere & Planets and Satellites (Chair: D.N. Baker)

17:00-17:25	S.M. Krimigis (Inv.)	"Jupiter's magnetosphere: New perspectives from the Ulysses and Galileo measurements"
17:25-17:50	William C. Feldman (Inv.)	"Fundamental Scientific Issues that Require Insitu Exploration of the Extended Corona for their Resolution"
17:50-18:05	M. Moncuquet et al.	"The structure of the Io plasma torus from Ulysses radio Measurements"
18:05-18:25	Th. Encrenaz	"First observations of the Solar-system objects with the ISO satellite"
18:25-18:45	B. Mennesson et al.	"A Space Infrared Interferometer to Detect and Characterize Earth-like Extrasolar Planets: the DARWIN project"
18:45-19:00	F. Roques	"Detection of aerosols in the Neptune Stratosphere"

Friday, July 4, 1997 (17:00 - 19:00) Room B

Solar and Stellar Winds & Planets and Minor Planetary Bodies (Chair: S. Krimigis)

17:00-17:10	G.A. Drillia et al.	"Semi-analytical dynamic modeling of the dayside Earth magnetopause"
17:10-17:20	G.A. Drillia et al.	"Semi-analytical dynamic modeling of the dayside Jovian magnetopause"
17:20-17:30	J. M. Polygiannakis et al.	"Estimating the solar wind plasma deformation and kinetic vorticity"
17:30-17:40	G. Exarhos et al.	"The expansion of the solar wind and the solar Alfven radius"
17:40-17:50	N. Meyer-Vernet et al.	"In situ measurements of solar wind thermal electrons from the Ulysses radio experiment"
17:50-18:00	H. Mavromichalaki et al.	"Features of the high-speed plasma streams during the last solar cycle"

Space and Planetary Physics and Astronomy (cont.)

18:00-18:15	Yu.V. Pisanko	"Plasma Electrodynamics in High Latitudinal Parts of the Magnetosphere of the Earth and of the Heliosphere: Similarities and Differences"
18:15-18:25	A. Sapar et al.	"Formation of resonance line profiles in stellar wind: theory and observations"
18:25-18:50	A. Coustenis et al.	"Titan's atmosphere and surface from near-IR spectra and images"
18:50-19:00	V.A. Smirnov	"About efficiency coefficient of meteor plasma radiation"

Stellar and Interstellar Astrophysics

Wednesday, July 2, 1997 (12:30 - 13:30) **Room A**
(Chair: P.G. Laskarides)

12:30-13:10	V. Castellani (Inv.)	"Stellar Evolution"
13:10-13:30	C. Sauty et al.	"Criteria for the collimation of winds into jets"

Wednesday, July 2, 1997 (17:00 - 19:00) **Room A**
(Chair: J.Krautter)

17:00-17:40	M. Harwit (Inv.)	"ISO observations of stars and Interstellar Medium."
17:40-18:00	I.L. Andronov et al.	"Cycles and periods in cataclysmic variable TT Arietis "
18:00-18:20	G. Djurašević	"The Starspots Activity of *SV Cam*"
18:20-18:35	L.L. Chinarova	"Magnetic activity of red secondaries: clues from the outburst cycle variations of dwarf novae"
18:50-19:05	A. Kakouris et al.	"Outflows from B type stars: Analytical 2-D modeling under athermal plus radiative driving"

Thursday, July 3, 1997 (17:00 - 19:00) **Room A**
(Chair: N. Kylafis)

17:00-17:40	B. Gustaffson (Inv.)	"Stellar Atmospheres"
17:40-18:05	A.D. Kuzmin et al.	"Detection the radio pulsar in gamma- X-ray source Geminga"
18:05-18:20	E.T. Harlaftis et al.	"Spiral shocks in a solar-size accretion disc"
18:20-18:35	M. Della Valle et al.	"Globular cluster calibration of peak brightness of the type Ia supernova 1992A"
18:35-18:50	J. Melnick et al.	"On the origin of supersonic turbulence in Giant Extragalactic HII regions"
18:50-19:05	V.M. Shulga et al.	"Spatial distribution of the intensity ratio for hyperfine components of the HCN J=1-0 line towards the Taurus Molecular Cloud (TMC-1)"

Stellar and Interstellar Astrophysics (cont.)

Friday, July 4, 1997 (09:30 - 10:30) **Room A**
(Chair: A.D. Kuzmin)

09:30-09:45	D.A. Ptitsyn	"Nucleosynthesis beyond the iron peak in thermonuclear supernovae"
09:45-10:00	E.N. Vinyajkin	"Secular decrease and random variations of the radio emission of Cassiopeia A at meter and decimeter wavelengths"
10:00-10:15	T. Tomov et al.	"MWC 560 - the situation not clear yet!"
10:15-10:30	Ju. Frantsman	"The initial-final mass relation for small and intermediate mass stars"

Friday, July 4, 1997 (17:00 - 19:00) **Room A**
(Chair: V.S. Gerogiannis)

17:00-17:15	V. Agapitou et al.	"The global evolution of magnetized accretion discs with outflows in young stars"
17:15-17:30	H. Rovithis-Livaniou et al.	"On the period study of eclipsing binaries: The cases of AT Peg and X Tri"
17:30-17:45	J-O. Goussard et al.	"Rapid rotation of protoneutron stars"
17:45-18:00	S. Plachinda	"The magnetic field variations connected to the stellar pulsations. The classical cepheid"
18:00-18:15	A.V. Dorodnitsyn et al.	"Outflowing envelopes from stars at arbitrary optical depths - new approach"
18:15-18:30	N. Vlahakis et al.	"On the structural stability of astrophysical jets"
18:30-18:45	S. Bogovalov et al.	"Numerical studies of the magnetocentrifugal acceleration and collimation of cosmic winds/jets"
18:45-19:00	D.V. Bisikalo et al.	"3D simulations of mass transfer in a low-mass X-ray binary"

Galaxies

Thursday, July 3, 1997 (17:00 - 19:00) **Room C**
(Chair: R.L. Davies)

17:00-17:30	A.M. Fridman (Inv.)	"Prediction and discovery of new structures - giant anticyclones in disks of spiral galaxies"
17:30-17:40	P.A. Patsis et al.	"Testing spiral structure by numerical simulations"
17:40-17:50	V.V. Lyakhovich	"A method of the restoration of 3D velocity field of gas in disks of spiral galaxies"

Galaxies (cont.)

17:50-18:20	A. Bosma	"Mass models of spiral galaxies"
18:20-18:30	N. Voglis et al.	"Mixing of positive and negative angular momentum components in protogalaxies"
18:40-19:00		"Discussions"

Friday, July 4, 1997 (11:00 - 13:00) **Room C**
(Chair: J. Palous)

11:00-11:30	A. Boselli et al. (Inv.)	"Mid-IR colors and star formation in galaxies observed with ISO"
11:30-11:40	J.M. Rodríguez Espinosa et al.	"ISO Observations of Seyfert Galaxies"
11:40-11:50	V. Charmandaris et al.	"Collisionally Induced Star Formation: The Cartwheel Galaxy as seen by ISOCAM"
11:50-12:00	N.I. Merkulova	"The UBVRI light curve behaviour of the Seyfert galaxy NGC 4151 during the extraordinary maximum of the nuclear brightness in 1989-1997"
12:00-12:10	O.V. Khoruzhii	"Nonlinear Radial Laminated Flow ("Laminated Pie") as a Manifestation of 3D Dynamics of Astrophysical Disks: Theory and Observations"
12:10-12:20	P. Flin et al.	"Subclustering in 50 clusters of galaxies"
12:20-12:30	Luka Č. Popović	"The AGN emission-line redshift difference: observation of the gravitational effect?"
12:30-12:40	N.G. Bochkarev et al.	"Spectral monitoring of active galactic nuclei at the 6-meter telescope of SAO RAS"
12:40-13:00		Discussion

Friday, July 4, 1997 (17:00 - 19:00) **Room C**
(Chair: N. Voglis)

17:00-17:30	R. Davies et al. (Inv.)	"The star formation history of early-type galaxies in the Fornax cluster"
17:30-17:40	P.O. Lindblad et al.	"Radio supernovae and super star clusters in the circumnuclear region of NGC 1365"
17:40-17:50	E. Ye. Khachikian et al.	"Radio supernovae and super star clusters in the circumnuclear region of NGC 1365"
17:50-18:00	J. Palouš et al.	"N-body models of the Gould's Belt"
18:00-18:10	J.M. Vílchez et al.	"Star Formation and Mergers in Nearby Compact Groups of Galaxies"
18:10-18:20	C. Vozikis et al.	"Morphological, photometrical and kinematical properties of merger remnants of compact groups of galaxies"

Galaxies (cont.)

18:20-18:30	A.E. Sansomet al.	"Chemical Evolution in Early-type Galaxies"
18:30-18:40	A.G. Polatidis et al.	"Superluminal motion in the parsec-scale jet of 3C380"
18:40-19:00		Discussion

Observational Astronomy – Instrumentation

Wednesday, July 2, 1997 (12:30 - 13:30) **Room D**
(Chair: J. van Paradijs)

12:30-13:10	R. Giacconi (Inv.)	"The Very Large Telescope Array: A progress report"
13:10-13:30	S.J. Wagner et al.	"DIVA - An Interferometric Satellite for Astrometric and Photometric Measurements"

Friday, July 4, 1997 (11:00 - 13:00) **Room A**
(Chair: J.H. Seiradakis)

11:00-11:20	I.L. Andronov	"Periodic and aperiodic processes in variable stars: some methods and results"
11:20-11:40	L. Hric et al.	"The Recurrent Nova T Coronae Borealis: After All, an Eclipse Detected in the T CrB paves the Way to the Solution of the 38 Years-Old Problem of the High Mass of the Hot Component"
11:40-12:00	D. Chochol et al.	"Long term photometry of symbiotic novae"
12:00-12:20	A.A. Deshpande et al.	"Radio observations of Geminga"
12:40-13:00	G. Pantazis et al.	"Determination of Gravity Darkening Exponents in Contact Systems of W UMa-type"

Saturday, July 5, 1997 (09:30 - 11:00) **Room A**
(Chair: P. Niarchos)

09:30-09:45	C. la Dous et al.	"ASPA - CCD-based sky patrol"
09:45-10:00	I. Bellas -Velidis et al.	"Automated Detection and Classification of Objective Prism Stellar Spectra"
10:00-10:15	M.K. Tsvetkov et al.	"The Wide-Field Plate Database"
10:15-10:30	N.G. Bochkarev	"Russian/Former Soviet Union (FSU) Experience in Small Telescopes Usage"
10:30-10:45	A.V. Sergeev et al	"PARSEC — many purposes measuring tool for photographic astronomy"
10:45-11:00	F. Sanchez et al.	"The Gran Telescopio Canarias Project (GTC)"

High Energy Astrophysics

Wednesday, July 2, 1997 (17:00 - 19:00) **Room D**

Gamma Ray Bursts (Chair: P. Caraveo)

17:00-17:30	C. Kouveliotou (Inv.)	"Overview of gamma ray bursts and recent developments"
17:30-18:00	F. Frontera (Inv.)	"The Beppo-SAX experiment (an overview)"
18:00-18:30	J. Heise (Inv.)	"X-ray counterparts of Gamma Ray Bursts"
18:30-18:45	J. van Paradijs	"Optical Identification of the 28 February Gamma Ray Bursts"
18:45-19:00	I. Georgantopoulos et al.	"ASCA observations of deep ROSAT fields"

Thursday, July 3, 1997 (17:00 - 19:00) **Room D**

Extragalactic Astrophysics (Chair: L. Titarchuck)

17:00-17:30	Th. Courvoisier (Inv.)	"Variability of the continuum in AGN: some results and pespectives"
17:30-18:00	D. Kazanas et al. (Inv.)	"Spectral-temporal correlations in Accreting Compact Sources"
18:00-18:15	A. Mastichiadis et al.	"Modeling the Rapid Variability of Blazar Emission"
18:15-18:30	S. Wagner	"Fast variations of the synchrotron emission of gamma-ray Blazars"
18:30-18:45	D. Petry	"Observation of intense TeV γ-radiation from Mkn 501"
18:45-19:00	A. Zezas et al.	"ROSAT and ASCA observations of the high X-ray luminosity starburst galaxies, NGC3310 and NGC3690"

Friday, July 4, 1997 (11:00 - 13:00) **Room D**

Galactic Sources (Chair: J. Ventura)

11:00-11:30	W. Becker et al. (Inv.)	"A ROSAT view of Millisecond Pulsars"
11:30-11:45	F. Haberl et al.	"Candidates for isolated neutron stars from the ROSAT survey"
11:45-12:00	P. Caraveo et al.	"On the (neglected) Proper Motion of the Crab Pulsar"
12:00-12:15	S. Rappaport	"Luminous Supersoft X-Ray Sources"
12:15-12:30	D. Psaltis et al.	"Neutron-Star Magnetic Fields in Low Mass X-Ray Binaries"
12:30-12:45	L. Titarchuk et al.	"Intrinsic signature of Black Hole systems"
12:45-13:00	N. Kylafis et al.	"Comptonization in Spherically Accreting Compact Objects"

High Energy Astrophysics (cont.)

Friday, July 4, 1997 (17:00 - 19:00) **Room D**
Galactic Sources & Astrophysics of the Galaxy (Chair: S. Rappaport)

17:00-17:30	G. Kanbach (Inv.)	"The identification of galactic high energy gamma ray sources"
17:30-17:45	M. Revnivtsev et al.	"GRANAT/SIGMA observations of 4U1705-44 and 4U1608-52 and spectral states of X-ray bursters"
17:45-18:00	E. Asseo	"Radio emission mechanisms in the pulsar magnetosphere"
18:00-18:30	A. Iyudin (Inv.)	"^{44}Ti decay gamma-ray line emission"
18:30-19:00	P. Duffy (Inv.)	"Particle acceleration in supernova remnants"

Cosmology and Relativity

Friday, July 4, 1997 (09:30 - 10:30) **Room C**
(Chair:)

9:30 -9:45	E. Plionis et al.	"Comparing the Large-Scale Density & Velocity Fileds of Clusters and Galaxies"
9:45 -10:00	C. Surace	ELAIS - preliminary ISOPHOT results"
10:00-10:15	E. Xanthopoulos	"New VLA observations of the CLASS gravitational lens 1608+656"
10:15-10:25	E. Kolokotronis	"The X–ray Brightest Abell Clusters (XBACs) dipole. Towards unveiling the local acceleration field"
10:25-10:35	S. Vasilakos	Evidence for Large-Scale Coherent Anisotropy within 20000 km/sec of the Local Group of Galaxies"

Friday, July 4, 1997 (11:00 - 13:00) **Room B**
(Chair:)

11:00-11:25	A. Gautchy	"Neutron star Oscillations seen by a Newtonian Astronomer"
11:25-11:50	B. Schmidt	"(To be announced) "
11:50-12:05	K. Kokkotas	"Gravitational waves from pulsating stars I "

Cosmology and Relativity (cont.)

12:05-12:20	G. Allen	"Gravitational Waves from Pulsating Stars II"
12:20-12:35	N. Stergioulas	"Nonaxisymmetric perturbations of rotating relativistic stars"
12:35-12:50	E. Chaliasos	"Perihelion Shift in the Kerr Metric"
12:50-13:05	Th. Apostolatos	"The first attempt to construct a bank of suitable templates to search for gravitational waves from coalescing binaries"

Saturday, July 5, 1997 (09:30 - 11:00) **Room C**
(Chair:)

9:30 -9:45	L. Witten	"(To be announced)"
9:45 -10:00	N.K. Spyrou	"On the nature of the dynamic mass of gravitating continuous sources"
10:00-10:15	N.K. Spyrou and F. Graos	"Observed versus cosmological spectral shift of a galaxy"
10:15-10:30	K. Kleidis	"Particle creation in theories with quadratic Langrangian"
10:30-10:45	K. Dimopoulos	"Primordial Magnetic fields from Superconducting Cosmic Strings"
10:45-11:00	A. Dimitropoulos	"Absorption of Gravitational Waves & Density Perturbations in the Early Universe"

History of Astronomy

Friday, July 4, 1997 (09:30 - 10:30) **Room B**
(Chair: E. Theodosiou)

09:30-09:40	M. Blomberg et al.	"Possible Minoan Contributions to Greek Astronomy"
09:40-09:50	G. Banos	"Evidence for Prehistoric Astronomy in the Aegean"
09:50-10:00	M.S. Dementév	"New interpretation of the ancient constellations"
10:00-10:10	I. Liritzis	"Astronomical orientation of two hellenic Pyramids"
10:10-10:20	M. Papathanassiou et al.	"Orientation of the greek temples on Delos"
10:20-10:30		"Discussion"

History of Astronomy (cont.)

Saturday, July 5, 1997 (09:30 - 11:00) **Room B**
(Chair: M. Papathanassiou)

09:30-09:40	M. Papathanassiou	"Historia Alexandri Magni: Astronomy, Astrology and Tradition"
09:40-09:50	L. Souvaltzi et al.	"Alexander the Great's Tomb at Siwa: The Astronomical Orientation"
09:50-10:00	E. Danezis et al.	"A presocratic cosmological proposal"
10:00-10:10	E. Danezis et al.	"Cosmological implications on the "Hexameron" of St. Basilius"
10:10-10:20	M. Stavensky	"Astronomical contribution of Chrysanthos Notaras, Patriarch of Jerusalem"
10:20-10:30	P. Rovithis	"Chrysanthos Notaras as an Astronomer"
10:30-10:40	V.A. Smirnov	"Theory of music and method of "Harmony" in J.Cepler's book "Harmony of Universe""
10:40-10:50	I. Pustylnik	"An Early History of Resolving Algol Paradox"
10:50-11:00		"Discussion"