UNITED NATIONS OFFICE AT VIENNA OFFICE DES NATIONS UNIES A VIENNE

Eighth United Nations/European Space Agency Workshop on
Basic Space Science : Scientific Exploration from Space
hosted by the Institute of Astronomy and, Space Sciences at Al al-Bayt University
on behalf of the Government of Jordan, 13-17 March 1999, Mafraq, Jordan

DRAFT PROGRAMME OF THE WORKSHOP

DATE/TIME	SUBJECT	SPEAKER
Friday, 12 March 1999	**Arrival**	
Saturday, 13 March 1999		
08:00-09:00	Registration	
09:00-9:30	*Opening Session* Royal Salute Reading Verses from the Koran Al al-Bayt University	 M.A. Al-Bakhit (Royal Salute)
09:30-10:00	Opening statements: United Nations	 N. Jasentuliyana (United Nations)
	European Space Agency	K. Bergquist (France)
	International Astronomical Union	J. Andersen (France)
	Institute of Astronomy and Space Sciences	H.M.K. Al-Naimiy (Jordan)
10:00-10:30	**Break**	

1. SOLAR SYSTEM EXPLORATION

Session A : The Sun
(Chairperson: N. Saleh, Jordan)

10:30-10:11:00	The Sun from space	K.R. Lang (USA)
11:00-11:20	High angular resolution studies of coronal structures with SOHO	M. Karovska (USA)

11:20-11:40	Ground based limb H-alpha survey of the Sun polar regions in relation with SOHO observations	J.-C. Noens (France)
11:40-12:00	The Sun and its imprint in inter-planetary space	S. Habbal (USA)
12:00-12:20	Solar loops	L. Koertvelyessy (Germany)
12:20-12:40	Plasma diagnostics of solar prominences observed by EIT, CDS, and SUMER aboard SOHO	K. Chamcham (Morocco)
12:40-13:00	Wavelet analysis of solar diameter measurements performed at the Calern Observatory astrolabe	R. Moussaoui (Algeria)
13:00-14:30	**Lunch**	

Session B : The 1999 Solar Eclipse and Solar Neutrinos
(Chairperson: N. Guessoum, Kuwait)

14:30-14:50	Search for neutrino decay during the 1999 solar eclipse	V. Popa (Romania)
14:50-15:10	The total solar eclipse of 1999 : opportunities for collaboration	S. Habbal (USA)
15:10-15:30	Solar neutrino problem revisited	S.S. Masood (Pakistan)
15:30-15:50	Helioseismology and Helioneutrino-spectroscopy	H.J. Haubold (United Nations)
15:50-16:10	**Break**	

Session C : Planets and Small Bodies
(Chairperson : R. Hajjar, Lebanon)

16:10-16:40	Recent results of Mars	B. Jakosky (USA)
16:40:17:00	International opportunities for collaboration in the Mars programme	B. Jakosky (USA)

17:00-17:20	A two dimensional simulation of the radio tomography of comet Wirtanen (ROSETTA mission)	J.-P. Barriot and M. Benna (France
17:20-17:40	Searching for asteroids and comets from the southern hemisphere	G. Tancredi (Uruguay)
17:40-18:00	The search for life in the Universe	B. Jakosky (USA)
20:00	Working Group Sessions : Status of Astronomy (Chairperson : H.J. Haubold and W. Wamsteker) (D. McNally, UK; C.P. Kalebwe, Zambia; M.I. Piso, Romania; S.D. Rughooputh, Morocco)	

Sunday, 14 March 1999

Session D : Planets and Small Bodies (continued)
(Chairperson : P. Stee, France)

09:00-09:20	Extrasolar planets discovered : use differential radial velocity for details	R. VikramSingh (USA)
09:20-09:40	Impact phenomena related to planetary sciences: experiments and modelling	J. Leliwa-Kopystynski (Poland)
09:40-10:00	Astrometry of near-Earth comets and asteroids	E.R. Palenque (Bolivia)
10:00-10:30	**Break**	
10:30-10:50	Comet Hale-Bopp and the diffuse interstellar lines	D. McNally (UK)
10:50-11:20	Developments of NEO observation systems and its application to astronomy education	S. Isobe (Japan)

2. SPACE

Session E : Data Archives
(Chairperson : M.J. Porter, Australia)

11:20-11:40	Scientific research using the electronic archive of the Hubble Space Telescope	R. Albrecht (Germany)
11:40-12:00	NASA's astrophysics data archives	H. Hasan (USA)

12:00-12:20	The Rossi X-ray Timing Explorer (RXTE) : its data archives and analysis	H. Sabat (Jordan)
12:20-14:00	**Lunch**	

Session F : Astronomical Satellite Missions
(Chairperson: I. Barghouthi, Jordan)

14:00-14:30	ABRIXAS : A small satellite to survey the sky in the medium-energy X-ray regime	J. Hoell (Germany)
14:30-14:50	An optical monitoring camera onboard the ESA high-energy mission INTEGRAL	A. Gimenez (Spain)
14:50-15:10	Experiment of opportunity in the International Space Station for developing countries	R. Naranjo (USA)
15:10-15:30	Gamma-ray lines from the galaxy: the GRO revolution	N. Guessoum (Kuwait)
15:30-15:50	Observing with SIRTF: opportunities for the scientific community participation	M. Deutsch (USA)
15:50-16:10	**Break**	
16:10-16:30	Advanced approach to concept and design studies for space missions	M. Deutsch (USA)
16:30-16:50	Scientific results from the Spanish satellite MINISAT 01	A. Gimenez (Spain)

Session G : World Space Observatory
(Chairperson : H.J. Haubold, UN)

16:50-17:20	WSO an opportunity	W. Wamsteker (ESA)
17:20-17:40	Science with the WSO	B. Shustov (Russia)
19:00	Working Group Sessions : Education in Astronomy (Chairperson : J. Andersen) (D. McNally, UK; G. Tancredi, Uruguay; A. Alzogaray, Uruguay; M.G. Iziomon, Nigeria; K. Chamcham, Morocco)	

Monday, 15 March 1999

3. SMALL ASTRONOMICAL TELESCOPES

Session H : Research and Education
(Chairperson : H.M.K. Al-Naimiy, Jordan)

09:00-09:30	Variable stars in research and education	J.A. Mattei (USA)
09:30-09:50	Upgrading the Philippine astronomical observatory for education and future research activities	C.P. Celebre (Philippines)
09:50-10:10	Research and education	A. Alzogaray (Uruguay)
10:10-10:30	**Break**	
10:30-11:10	Observational studies of stellar evolution	J. Andersen (Denmark)
11:10-11:30	Research projects of astrophysical importance that can be carried out with small telescopes	M. Parthasarathy (India)
11:30-11:50	Spectroscopy on Small telescopes - the Echelle spectrograph	M.J. Porter (Australia)
11:50-12:10	Importance of small telescopes in the understanding of active hot stars physics	P. Stee (France)
12:10-12:30	The use of small telescopes in astronomy education and research	S. Larsen (Denmark)
12:30-14:00	**Lunch**	

Excursion to Jerash

Tuesday, 16 March 1999

Session I : Research and Education (continued)
(Chairperson : H. Hasan, USA)

09:00-09:20	MAN 2000: A regional project for Mediterranean astronomy	F. Ferrini (Italy)
09:20-09:40	ESPACE : A European system for particle	P. Habison

	and astrophysical cyber education	(Austria)
09:40-10:00	Imagery in the presence of turbulence using slit aperture telescope with partial adaptive corrctions	H. Touma (Morocco)
10:00-10:20	Experiments in space-related educational and public outreach activities : NASA-GSFC experience	M.R. Perez (Chile)
10:20:-10:50	**Break**	

Session J : Telescope Networking
(Chairperson : R. Moussaoui, Algeria)

10:50-11:10	Provision of astronomical equipments for developing countries by the ODA of Japanese Government	M. Kitamura (Japan)
11:10-11:40	Robotic telescopes and networks : new tools for education and science	F.R. Querci (France)
11:40-12:00	A network of automated telescopes for education and research	R.J. Williams (USA)
12:00-12:20	What can we expect from a new radio telescope in upper Egypt	R.J. Schwartz (Germany)
12:20-14:00	**Lunch**	

Session K : Atmospheric Effects
Chairperson : K. Kitamura)

14:00-14:20	Zenith night sky brightness and meteorological conditions at Kottamia observatory site	S.N. Nawar (Egypt)
14:20:14:50	Monitoring of light energy loss at night	S. Isobe (Japan)
14:50-15:10	Seeing effects on diameter measurements performed with a solar astrolabe	M. Bouzaria (Algeria)
15:10-15:40	**Break**	

4. SCIENCE
Session L : Stella Studies
(Chairperson : R. Albrecht, Germany)

15:40-16:00	Study of advanced stages of evolution of low mass stars with the Hubble Space Telescope (HST)	M. Parthasarathy (India)
16:00-16:20	Intermediate accretion rate dipolar shock structures	R.Y. Hussain (Jordan)
16:20-16:40	Search for cosmic ray point sources with the MACRO detector at Gran Sasso	H. Dekhissi (Morocco)
16:40-17:00	On the temporal variability, vertical profile and modelling of net radiative flux within REKLIP	M.G. Iziomon (Nigeria)
19:00	Working Group Session (Chairperson : M. Laffaiteur) The UN/ESA Workshop on Basic Space Science in 2000 : The Millennium Workshop	

Wednesday, 17 March 1999

Session M : Stella Studies (continued)
(Chairperson : M. Al-Hilo, Jordan)

09:00-09:20	Search for magnetic monopoles and for nuclearites with the MACRO detector	V. Popa (Romania)
09:20-09:40	Observation and modelisation of B[e} stars	J. Bittar (France)
09:40-10:00	A study of short-period eclipsing binary systems in NGC 188	M.T. Edalati Sharbaf (Iran)
10:00-10:30	**Break**	
10:30-10:50	Imaging polarimentary of young stellar objects	R. Hajjar (Lebanon)
10:50-11:10	Employing artificial neural networks in stellar astronomy	R.K. Gulati (Mexico)
11:10-11:30	UBV photometry of the massive eclipsing binary TT Aurigae	O. Demircan (Turkey)

11:30-11:50	Accurate atomic data for its application in space science	K.S. Baliyan (India)
11:50-13:00	**Lunch**	

Session N : Cosmology
(Chairperson : B. Shustov, Russia)

13:00-13:30	Observational cosmology from space - constraints on theoretical models	H.-J. Blome (Germany)
13:30-13:50	Galactic evolution : a physical approach	F. Ferrini (Italy)
13:50-14:10	The photometric evolution of galactic discs	K. Chamcham (Morocco)
14:10-14:30	Star-burst properties of spiral galaxies	R.A. Kandaliyan (Jordan)
15:30	**Closing of the Workshop** United Nations ESA Al al-Bayt University France	

The following presentations are part of respective Working Group Sessions:

S.D. Rughooputh (Mauritius) : Space science and technology in Mauritius: current status and future outlook
K. Chamcham (Morocco) : Teaching of astronomy in Morocco and the public demand
M.G. Iziomon (Nigeria): Basic space science outreach at pre-collegiate level in central Nigeria
M.I. Piso (Romania): On the role of basic space science in sustainable development
D. McNally (UK): Astronomy in education - esoteric or essential?
D. McNally (UK): Will astronomy survive extinction?
A. Alzogaray (Uruguay): Astronomy teaching at medium education in Uruguay
G. Tancredi (Uruguay): Popularization of astronomy in an enjoyable way: an experience in a planetarium
C.P. Kalebwe (Zambia): Factors retarding the development of astronomy and space sciences in Zambia

POSTER SESSION

M. Bouzaria (Algeria): A comparative study between analysis of solar diameter measurements
K. Chamcham (Morocco): Chemical evolution of the solar neighbourhood parameters registered at a tropical location

M.A. Bakry (Egypt): Expansion of a planetary orbits

W. Wamsteker (ESA): INES Astronomy Machine from IUE

P. Habison (Austria): The usage of historical telescopes in the field of astronomy and astrophysics science education

S. Nawar (Egypt): Morning sky twilight brightness and colour at zenith at Abu-Simbel site

S.D. Rughooputh (Mauritius): A new approach for handling astronomical images