### UN/ESA/NASA/JAXA/BAS Workshop on the International Heliophysical Year 2007 and Basic Space Science ''First Results from the International Heliophysical Year 2007'' 2-6 June 2008, Sozopol, Bulgaria

### Monday 02 June

#### Morning session 1 opening ceremony

- 09:00 Welcome Remarks (K. Goergieva)
- 09:05 Welcome by Bulgarian Government official/Academy of sciences

09:15 Welcome by the Mayor of Sozopol

09:20 IHY update (N. Gopalswamy)

09:35 UNBSS update (H. Haubold)

09:50 IHY overview (J. Davila)

10:05 A note from LOC (K.Georgieva)

10:10 Rozelot, J.-P. New findings: Increasing solar trend that can change Earth climate

10:30 Break

### Morning session 2 Climate (10:50 – 12:30) CHAIR: J. Davila

Molodykh S.I. et al, Physical model of solar activity influence on climate characteristics of troposphere

Kilifarska N.A.. Mechanisms of Solar Influences on the Polar Atmosphere

<u>Pustil`nik</u> L. et al, Possible Space Weather Influence on the Earth Wheat Markets

A.Kilcik et al., Possible Traces of Solar Activity Effect on the Land Surface Temperature of Turkey

J.O.H. Ndeda et al., Solar signature in the drought occurrence in Kenya, East Africa

Afternoon session 1 Heliobiology (15:30 - 17:10) CHAIR: V. N. Obridko

*Elchin Babayev*, Direct and Indirect Indicators of Space Weather Influence on Human Physiological and Cardio-Vascular Health State in Middle Latitudes: Results of Azerbaijani/Collaborative Studies

T.K.Breus et al., Heliogeomagnetic rhythms are indeed synchronizers of biological "clocks"

Kleimenova N.G.et al., Seasonal variations of magnetic storm influence on myocardial infarctions

Dimitrova S.et al., Possible effects of solar and geomagnetic activity on sudden cardiac death

Pipin V.V., Ragulskaia M.V., Helio-geophysical impact on variations of basic ECG properties in light of nonlinear dynamical model

17:10 Break

Afternoon session 2 Solar physics I (17:30 - 19:10) CHAIR: A.V.Stepanov

<u>Ishkov</u> V.N., Solar 23<sup>rd</sup> Cycle in the Development

Hiremath, K.M. Physics of the solar cycle: new views

<u>Obridko</u> V.N. et al., Long-term variations in the global magnetic fields, sunspot activity, and meridional circulation

A. Abdel Hady, Analytical study of solar energetic flares during cycle 23

<u>*Ryabov</u> M.I. et al.*, The solar flare activity predictions on the base of microwaves radio-emission of complexes activity and complexes of active regions</u>

### **19:30 Welcome Reception**

### **Tuesday 03 June**

## Morning session 1 Solar physics II (09:00 – 10:40) CHAIR: R.P.Kane

A.V.<u>Stepanov</u>et al., Acceleration, dynamics and emission of energetic particles in solar flare loops

*E.V.<u>Ivanov</u> et al*, Relationship between the CME parameters and large-scale structure of solar magnetic fields

Fainshtein V.G.. Determination of characteristics of full halo coronal mass ejections

Obridko V.N. et al., The Bz component in CMEs and in their source regions

A. Andic, High frequency oscillations and their connection to chromospheric heating

10:40 Break

## Morning session 2 Heliosphere, cosmic rays, IMF (11:00 – 12:40) Chair: R. Hippler

Lev Dorman. Cosmic rays and space weather effects: methods of forecasting

*A.Hovhanissyan et al.*, Parameters of the Aragats Space-environmental Center monitors as measured at start of 24<sup>th</sup> Solar Cycle

*Dorman L., Pustil`nik L.*, On the probability of solar cosmic ray fluency during SEP event in dependence of the level of solar activity

*M. Gigolashvili*, About the quasi 11-year's variation of the solar constant, various parameters of the heliogeophysical phenomena, and solar wind

*MarisG., MarisO.*, Characteristics of the High Speed Streams during Polarity Reversals of the Solar Magnetic Field

12:40 Lunch

## Afternoon session 1 Magnetosphere (15:30 - 17:10) Chair: K. Yumoto

Gonzalez W.. Interplanetary origin of geomagnetic storms

WangC. et al., 3D Global Simulation of the Interaction of Interplanetary Shocks with the Magnetosphere

<u>*BiktashL*</u>..The solar wind energy input rate and recovery of the magnetospheric ring current during the two last solar cycles

Cheremnykh O.K., Yatsenko V.A.. Nonlinear dynamic-information models of the magnetosphere for space

weather prediction

KolevaR. et al., Magnetotail lobe population as measured by INTERBALL-1 satellite

17:10 Break

Afternoon session 2 Ionosphere, high and middle atmosphere I (17:30 - 19:10) Chair: W. Gonzalez

MikhaylovA.V. . Quiet-time F2-layer disturbances: Morphology and some Formation Mechanisms

<u>Veenadhari</u>B. et al., Storm sudden commencements at Indian stations and associated changes in interplanetary magnetic field orientation

N.A.Kilifarska et al., . Cosmic Ray Showers and their relation to the Stratospheric Sudden Warmings

MedvedevaI.V. et al., Behavior of the 557.7 emission in MLT region during stratospheric warning events

*A.V.<u>Mikhalev</u>*, The 557.7 nm airglow variations and anomalies in the lower atmosphere and surface temperature

**19:30** Dinner with nestinari (*dances on fire*)

## Wednesday 04 June

Morning session 1 Ionosphere, high and middle atmosphere II (09:00 – 10:40) Chair: A. Hanslmeier

Hoang Thai Lan et al., Equatorial Spread F

A. M. Tsymbal et al., The midlatitude D-region response to geomagnetic storms

BiktashL. and Maruyama T., Equatorial ionosphere dynamics during geomagnetic storms

*L.G.<u>Bankov</u>et al.*, 3D empirical model of topside ionosphere at mid and low latitudes during Solar minimum conditions

*Hamelin, M.*, and the PWA-HASI team , The electrical environment of Titan after HUYGENS: lower ionosphere and electromagnetic resonances

10:40 Break

Morning session 2 Access to data of the Sun-Earth system (11:00 – 12:40) Chair: H. Haubold

*A.<u>Hanslmeier</u>, I.Kinereich.* The Joint Information System – A Database for Solar and Heliospheric Research

N. Gopalswamy et al., A Catalog of halo CMEs from SOHO

D. <u>Atanasov</u> et al., Data base of geoeffective solar wind structures, geomagnetic indices, and atmospheric dynamics parameters

<u>A. Yeghikyan</u>. WEB based Data Visualization and processing tools for ASEC and SEVAN particle detector networks

<u>Klimov</u> S.I., Grushin V.F. Organizational and methodical problems of the comparison of data of the ground-based and satellite measurements

## 13:00 EXCURSION (Lunch on Board)

## Thursday 05 June

Morning session 1 Instruments and networks I (09:00 - 10:40) Chair: A. Ozguc

Inan et al., Space Science Capacity Building with AWESOME ELF/VLF Receivers

<u>Singh</u>*R. et al.*, First ELF/VLF observational results from low latitude sites setup at Allahabad , Nainital and Varanasi in India under IHY/UNBSSI program

ChilingarianA.. Surface Particle Detectors in Space Weather forecast

A.Reymers et al, Hybrid particle-detector network located at Middle-Low latitudes for Solar Physics and Space Weather research

<u>Angelov</u> I. et al., Muon Telescopes at Basic Environmental Observatory Moussala and South-West University - Blagoevgrad

10:40 Break

Morning session 2 Instruments and networks II (11:00 - 12:40) Chair: A. Chilingarian

<u>Yumoto</u>K., MAGDAS/CPMN Group. MAGDAS Project at SERC for Space Weather and Its Preliminary Result

*Kim Y.-H. et al.*, Optical Solar Observing Facilities in Korea Astronomy and Space Science Institute (KASI)

*Falkovych I.S. et al.*, The investigations of the solar wind with the large decametric radio telescopes of Ukraine

LytvynenkoI. et al., Multi-purpose inexpensive network for geophysical and astronomical monitoring

*Guineva V., Werner R., Vince I.*, High resolution spectroscopic measurements of the O 2 (1,0) atmospheric system band rotational absorption lines

12:40 Lunch

Afternoon session 1 Instruments and networks III (15:30 - 17:10) Chair: Ts. Dachev

*R. Terrazas* A Solar station in a National University : a joint project of ICA National University, Geophysical Institute of Peru and National Astronomical Observatory of Japan

K. Napo, Solar radiation measure of Togo

*Dachev, Ts. et al*, Overview of the space radiation measurements results performed under the Bulgarian space program

Han W. et al., Compact Wide-Field Survey IR Space Telescope Design

*V.T. Rozumenko et al.*, The MF radar technique: potential for studies in the mesospheric electro-dynamic area

16:00 Break

Afternoon session 2 Poster viewing (17:30 - 19:10)

(ALL poster authors need to be present at their posters)

# **20:00** Conference dinner

## Friday 06 June

### Morning session 1 Instruments and networks IV (09:00 – 10:40) Chair: Hamid Al Naimiy

Z.Kobylinski, A.Ajabshirizadeh, A.Wysokinski, A doption of E lman recurrent neural networks for reconstruction of geomagnetic data set registered at Swider observatory in periods of inconsistent or missing data

Shkevov R., Continuous measurements during active space experiments

*Semkova J.*, Investigation of ionizing radiation distribution in a human phantom aboard the International Space Station

*Krumov A., Nikolova A.*, Thematic investigation of F raunhofer line dynamical characteristics for the needs of plant fluorescence monitoring

*Adassuriya J. et al.*, Observations of Halpha line profiles in Be stars using 45cm Cassegrian telescope at Arthur C. Clarke Institute in Sri Lanka

### 10:40Break

**Morning session 2** Participation of nations in IHY and BSS (*15 min per presentation without discussion*) (11:00 – 12:40) Chair: E. Babayev

<u>*HipplerR. and the SWEETS Consortium.*</u> Space Weather and Europe – an Educational Tool with the Sun (SWEETS)

StoevaP., Stoev A.. Internatinal Heliophysical Year - Education and Public Outreach Activities in Bulgaria

<u>Al-Naimiy</u> Hamid. Research and Education in Astronomy and Space Sciences for Arab Countries<u>Al-Naimiy</u> Hamid. IHY and BSS in West Asia J.

Cho et al., KASI Activities for Space Weather

*Ishitsuka* 50 YEARS OF IGY AND NOW IHY: ACTIVITIES OF GEOPHYSICAL INSTITUTE OF PERU CONCERNING IHY

A. Mahrous, K. Yumoto, T. Garner. IHY activities in Egypt

Afternoon session 1 Closing session and information about future acticities (14:00 – 15:00) Chair: N. Gopalswamy

15:00End of UN/ESA/NASA/JAXA Workshop

Afternoon session 2 Regional meeting (15:00 - 17:00)

17:00 Public lecture (R. P. Kane)