



The International Space Weather Initiative School on Space Weather and Global Navigation Satellite Systems

08 – 12 October 2018, Baku, Azerbaijan

PROGRAMME

Sunday, 7 October

Arrival, registration

Monday, 8 October

Opening Ceremony

09:00

Welcoming addresses

- Dr. *Elchin Babayev*, Executive Director of the Science Development Foundation under the President of the Republic of Azerbaijan
- Academician *Akif Ali-zadeh*, President of the Azerbaijan National Academy of Sciences
- Dr. *Nat Gopalswamy*, NASA's Goddard Space Flight Center, President of ICSU's Scientific Committee on Solar-Terrestrial Physics (SCOSTEP), Executive Director of the International Space Weather Initiative (ISWI)
- Academician *Roald Sagdeev*, Professor of the National Aviation Academy and ADA University

General Lectures, Plasma Physics, Solar Physics & Space Weather

Session 1, Chair: Elchin Babayev, Azerbaijan

09:45

The International Space Weather Initiative (ISWI), *Nat Gopalswamy*, USA

10:00

International Committee on Global Navigation Satellite Systems (ICG), *Sharafat Gadimova*, United Nations Office for Outer Space Affairs (UNOOSA), Austria

10:15	Space Weather Effects on Modern Society, <i>Patricia Doherty</i> , USA
10:35	Group photo
10:40	Coffee Break
11:00	Solar Sources and Space Weather, <i>Nat Gopalswamy</i> , USA
12:00	The Tools and Recipes Plasma Physics Provides for Understanding Space Weather, <i>Roald Sagdeev</i> , Azerbaijan
13:00	Lunch Break

Session 2, Chair: Patricia Doherty, USA

14:00	Physics of the Solar Interior and Atmosphere, <i>Mark Miesch</i> , USA
15:00	Solar Wind: Low-frequency Turbulence in the Anisotropic Plasma, <i>Namig Dzhililov</i> , Azerbaijan
16:00	Coffee Break
16:20	Magnetic Reconnection and Explosive Events Relevant for Space Weather, <i>Grigori Vekstein</i> , UK
17:20	Solar Energetic Particles, <i>Pertti Makela</i> , USA
18:20	Adjourn
19:00	Welcome Dinner hosted by the AzerCosmos

Tuesday, 9 October

The Ionosphere, Magnetosphere and Sun-Earth Connection

Session 1, Chair: Nat Gopalswamy, USA

09:00	What Dynamo Theory can Say about Extreme Events in the Sun and Stars, <i>Elena Popova</i> , Russia
10:00	Ionospheric Physics, <i>Sandro Radicella</i> , Italy
11:00	Coffee Break
11:20	The Magnetosphere and its Coupling with the Ionosphere, <i>Endawoke Yizengaw</i> , USA
12:20	The Sun-Earth Connection, <i>Christine Amory-Mazaudie</i> , France
13:20	Lunch Break

Session 2, Chair: Dominic Hayes, European Commission

14:20	Introduction to GNSS, <i>Renato Filjar</i> , Croatia
15:20	Ionospheric Irregularities: Global Occurrence and Impacts on GNSS, <i>Keith Groves</i> , USA
16:20	Coffee Break
16:40	Hands on: Solar Eruptions and Using the CME Catalog, <i>Nat Gopalswamy</i> , USA
17:30	Adjourn
18:30	Presentation of 3D-movie “The Sun, Our Living Star” in Tusi-Bohm Planetarium (Baku) followed by reception in Planetarium

Wednesday, 10 October

Technical Tours

08:00	Technical tour to the AzerCosmos (38th km of the Baku-Shamakhy Highway) Introduction of the AzerCosmos, <i>Rashad Nabiye</i> v, Azerbaijan
	Coffee / Tea sweet table
10:30	Technical tour to the Shamakhy Astrophysical Observatory (Shamakhy region)
12:30	Lunch Break

Solar-Terrestrial Relations

Session 1, Chair: Sandro Radicella, Italy

14:00	Introduction of the Shamakhy Astrophysical Observatory, <i>Namig Dzhililov</i> and <i>Elchin Babayev</i> , Azerbaijan
14:15	Solar Activity and Possible Influence on Terrestrial Climate, <i>Namig Dzhililov</i> , Azerbaijan
15:00	Solar and Geomagnetic Activity Potential Impacts on Biological Systems, <i>Elchin Babayev</i> , Azerbaijan
15:30	Visit to the Telescopes
16:30	Coffee / Tea sweet table
17:30	Return to Baku

Thursday, 11 October

Global Navigation Satellite Systems (GNSS)

Session 1, Chair: Sharafat Gadimova, UNOOSA, Austria

09:00	Ionospheric Modeling and its Challenges due to Space Weather, <i>Sandro Radicella</i> , Italy
10:00	The GLONASS System as an Instrument of Monitoring the Weather Effects, <i>Victor Alpatov</i> , Russia
11:00	Coffee Break
11:20	Galileo and EGNOS: Reap the Benefits, <i>Dominic Hayes</i> and <i>Augusto Gonzalez</i> , European Commission
12:20	GNSS for Ionospheric and Space Weather Research, <i>Keith Groves</i> and <i>Endawoke Yizengaw</i> , USA
13:20	Lunch Break

Session 2, Chair: Keith Groves, USA

14:20	GNSS Monitoring and Mitigation of Space Weather Storms, <i>Anthea Coster</i> , USA
15:20	Coffee Break

15:40	GNSS Applications Affected by Space Weather, <i>Renato Filjar</i> , Croatia
16:40	Nano-satellites and Space Debris, <i>Tarlan Mammadzade</i> , Azerbaijan
17:40	Adjourn
19:00	Gala Dinner hosted by the Scientific Development Foundation

Friday, 12 October

Closing Ceremony, Discussions, Technical Tour

Session 1, Chair: Elchin Babayev, Azerbaijan

09:00	Closing Ceremony General Discussions Certificates Award
10:30	Coffee Break
11:00	Technical tour to the National Aviation Academy (Baku) Introduction of the National Aviation Academy, <i>Anvar Hazarkhanov</i> and <i>Adalat Samadov</i> , Azerbaijan
	Return to City Center and Hotels

Saturday, 13 October

Departure