

Monday 4.4.2016

08:30-09:00 Welcome and practicalities

Session 1: Solar dynamo as a driver of space climate

09:00 - 09:30 Robert Cameron Keynote: The long term variability of the Sun: Physical processes and mechanisms

09:30 - 09:50 Dário Passos Mechanisms for producing Grand Minima: a short review

09:50 - 10:10 Matthew Browning Some (Solar) surprises from studying (other) stars

10:10 - 10:30 Mark Rast The dynamo origin of solar spectral irradiance variations

10:30 - 11:00 Coffee

11:00 - 11:20 Frederick Gent Long term variability of the solar dynamo

11:20 - 11:40 Jörn Warnecke Connecting the solar dynamo below the surface with ejection of twisted magnetic fields above the surface

11:40 - 12:00 Patrice Beaudoin Impact of the solar tachocline on the long term magnetic cycle in a global MHD simulation

12:00 - 12:20 Andres Muñoz-Jaramillo The rails inside the Sun and the butterflies that ride them

Lunch / Snow exercise

Session 2A: Long-term solar activity

14:30 - 15:00 Alexei Pevtsov Long-term trends in chromospheric activity

15:00 - 15:20 W. Dean Pesnell The Future of Solar Activity Forecasts

15:20 - 15:50 Natalie Krivova Reconstructions of past solar irradiance

15:50 - 16:10 Valentina Zharkova Heartbeat of the Sun derived with Principal Component and Symbolic Regression analysis and prediction of solar activity on a millennium timescale

16:10 - 16:30 Reza Rezaei Long-term trends in properties of sunspots

16:30 - 17:00 Coffee

17:00 - 17:20 José M. Vaquero The Maunder Minimum: some recent progress

17:20 - 17:40 Ken McCracken The Hallstatt and Eddy Cycles in Solar Activity over the past 22 Millenia

17:40 - 18:00 Raimund Muscheler The New Sunspot Number Series in Comparison to Cosmogenic Radionuclide Based Solar Activity Reconstructions

18:00 --> Poster session

Tuesday 5.4.2016

Session 2B: Long-term solar activity

08:30 - 09:00	Frédéric Clette	The new Sunspot Number in focus
09:00 - 09:20	Ed Cliver	Comparison of New and Old Sunspot Number Time Series
09:20 - 09:40	Leif Svalgaard	The effect of weighting and group over-count on the Sunspot Number.
09:40 - 10:00	Ilya Usoskin	New calibrated sunspot group series since 1749
10:00 - 10:30 Coffee		
10:30 - 10:50	Egor Illarionov	Reconstruction method of sunspot positions from observations of H. Flaugergues in the end of the 18th century
10:50 - 11:20	Thomas K. Friedli	Reconstruction and homogenization of the Wolf series from 1849 to 2015
11:20 - 13:00 TOPICAL DEBATE ON SUNSPOT NUMBERS		
Lunch / Snow exercise		

Session 3: Asymmetric Sun

14:30 - 14:50	Kalevi Mursula	HCS shift over 100 years
14:50 - 15:10	Giuseppe Nistico	N-S asymmetry of the solar magnetic field from polar jets
15:10 - 15:40	Kanya Kusano	Hemispheric Asymmetry of Solar Cycle Activities
15:40 - 16:00	Judit Muraközy	Asymmetry in the solar hemispheric poloidal and toroidal cycles
16:00 - 16:20	Geza Erdös	Long-lasting active longitude on the Sun and its terrestrial impac
16:20 - 16:50 Coffee		

Session 4A: Extreme events in the Sun-Earth system

16:50 - 17:20	Hugh Hudson	Keynote: Solar Extreme Events
17:20 - 17:40	Daniel N. Baker	The Major Solar Eruptive Event in July 2012: Defining Extreme Space Weather Scenarios
17:40 - 18:10	Pete Riley	Extreme Space Weather Events: Probabilities and Uncertainties
18:10 - 18:30	Emilia Kilpua	Solar and Heliospheric Prerequisites For The Occurrence of Extreme Storms
19:15 -->	SYMPOSIUM DINNER	

Wednesday 6.4.2016

Session 4B: Extreme events in the Sun-Earth system

08:30 - 08:50	Kazunari Shibata	Superflares on Sun-like Stars
08:50 - 09:10	Nat Gopalswamy	Extreme CME events from the Sun

09:10 - 09:30	Jon Linker	Coronal Magnetic Field Energy Storage: Limits on the Size of the Largest Eruptions
09:30 - 09:50	Florian Mekhaldi	Multiradionuclide evidence for the solar origin of the cosmic-ray events of AD 774/5 and 993/4
09:50 - 10:10	Ralph Neuhaeuser	Strong variations of 14-C around AD 775 and AD 1795 - due to solar activity
10:10 - 10:40 Coffee		

Session 5A: Solar photosphere, corona and solar wind

10:40 - 11:00	Ilpo Virtanen	Scaling of photospheric magnetic field observations
11:00 - 11:20	Theodosios Chatzistergos	Examination of historical spectroheliogram archives
11:20 - 11:40	Katya Georgieva	Reconstruction of the long-term variations of the parameters and structure of the solar wind from geomagnetic data
11:40 - 12:10	Mathew Owens	Centennial variations in the heliosphere
12:10 - 12:30	Gordon Petrie	Solar-cycle Variability of Coronal Mass Ejections and the Solar Magnetic Field
Lunch / Snow exercise		

Session 5B: Solar photosphere, corona and solar wind

15:00 - 15:20	Matthieu Kretschmar	Why should we care about small flares ?
15:20 - 15:40	Philippe Lamy	Coronal Mass Ejection over Solar Cycles 23 and 24: a statistical view
15:40 - 16:00	Christina Kay	Variations in CME Deflection and Rotation over the Solar Cycle
16:00 - 16:30 Coffee		

Session 6: SW-Magnetosphere-Ionosphere interaction

16:30 - 16:50	Tuija Pulkkinen	Long-term changes in the magnetosheath: Solar wind drivers and magnetospheric effects
16:50 - 17:10	Eija Tanskanen	Evolution of Alfvénic fluctuations during solar cycle 23
17:10 - 17:30	Rajkumar Hajra	High-Intensity Long-Duration Continuous AE Activity (HILDCAA) and associated effects on Earth's outer radiation belt
17:30 - 17:50	Timo Asikainen	Centennial reconstruction of energetic electron precipitation
17:50 - 18:20	Ingrid Cnossen	Effects of the changing geomagnetic field on the atmosphere

Thursday 7.4.2016

Session 7: Solar Influence on atmosphere and climate

08:30 - 08:50	Greg Kopp	Modern Measurements of Solar Irradiances
08:50 - 09:10	Mustapha Meftah	Recent Solar Spectral Irradiance Observations
09:10 - 09:30	Alexander Ruzmaikin	Solar Influence on the Earth's Climate on Centennial Time Scale
09:30 - 09:50	Sheila Kirkwood	Ionization and NO production in the polar mesosphere during high speed solar wind streams

09:50 - 10:10	Linda Hunt	Solar induced variability in the thermosphere over the last 70 years
10:10 - 10:30	Coffee	
10:30 - 10:50	Esa Turunen	Mesospheric ozone destruction by high-energy electron precipitation during pulsating aurora
10:50 - 11:20	Eugene Rozanov	Treatment of the sun-related effects in climate and atmospheric models: status and development
11:20 - 11:40	Pavle Arsenovic	Influence of Middle Range Energy Electrons on Atmospheric Chemistry and Climate
11:40 - 12:00	Pekka T. Verronen	Modeling the solar cycle effect of radiation belt electron precipitation on the atmosphere
12:00 - 12:20	Rémi Thiéblemont	Solar influence on North Atlantic Climate
12:20 - 12:40	Colin Price	The impact of Space Climate and Weather on the Atmospheric Global Electric Circuit (GEC)
12:40-13:10	Symposium summary	

POSTERS

DYN-1	Tünde Baranyi	Study of Joy's law based on Debrecen tilt angle datasets
DYN-2	Egor Illarionov	Statistics of tilt angles of bipolar solar regions
DYN-3	Maarit Käpylä	Mechanisms for grand minima in dynamo active convectively turbulent flows
DYN-4	Corinne Simard	Characterization of grand minima in a spherical-2D non-kinematic mean-field dynamo model
DYN-5	Benoit Tremblay	Reconstruction of Photospheric Plasma Motions and Eddy Magnetic Diffusivities in Solar Active Regions
LON-1	Eleanna Asvestari	A critical assessment of different sunspot number reconstructions using cosmogenic radionuclide archives
LON-2	Eleanna Asvestari	Reconstruction of the heliospheric cosmic ray modulation in centennial scales: empirical modelling
LON-3	Ryszarda Getko	The errors in sunspot group heliographic positions
LON-4	Rok-Soon Kim	Prediction of long-term solar activities based on fractal dimension method
LON-5	Laure Lefevre	Recovering a sunspot catalogue for the period 1914-1920 from Madrid
LON-6	Laure Lefevre	Uncertainties in the Sunspot Number
LON-7	András Ludmány	Sunspot databases of the Debrecen Observatory
LON-8	Ken McCracken	The Onset Phases of Large Grand Solar Minima
LON-9	Ralph Neuhaeuser	Telescopic sunspot observations by Marius and others 1611-1620
LON-10	Leif Svalgaard	Calibration of the Sunspot and Group Numbers Using the Waldmeier Effect
LON-11	Ilya Usoskin	New reconstruction of solar activity during the Holocene: the Hallstatt cycle
LON-12	José M. Vaquero	Monitoring the solar radius from the Royal Observatory of the Spanish Navy during the last quarter of millennium
AS-1	Linhua Deng	Systematic regularity of hemispheric sunspot areas during solar cycles 9-24
AS-2	Raisa Leussu	Properties of butterfly diagram wings since the early 19th century
EX-1	Paulo Ribeiro	The first documented space weather event that perturbed the communications networks in Iberia
COR-1	Anik De Groof	Unexpectedly long-lived and hot EUV loops, extending up to 3 solar radii
COR-2	Melinda Dósa	CIR-XL recurring for several years
COR-3	Tibebu Ayalew	Structure of the photospheric magnetic field during sector crossings of the heliospheric magnetic field
COR-4	Romarc Gravet	On the UV contrast of solar magnetic features and variations of small magnetic fields
COR-5	Amr Hamada	Identifying and tracking solar coronal holes from synoptic EUV maps of SOHO/EIT and SDO/AIA images

COR-6	Guan-Han Huang	An Examination of Two Definitions of The Coronal Hole Using High Speed Streams Events
COR-7	Jennimari Koskela	Polarity comparison between the coronal PFSS model field and the heliospheric magnetic field at 1 AU over solar cycles 21-24
COR-8	Chia-Hsien Lin	Examining the forces and kinematics of coronal mass ejections in the interplanetary space
COR-9	David Martin-Belda	Surface flux transport simulations. Inflows towards active regions and the modulation of the solar cycle.
COR-10	David Perez-Suarez	Can we study Coronal Mass Ejections without a coronagraph?
COR-11	Iiro Virtanen	Surface flux transport simulations of the solar magnetic field from 1978 to 2010
COR-12	Pauli Väisänen	Evolution of solar wind turbulence and intermittency over the solar cycle
COR-13	Julien Wojak	Twenty Years of Space Observations of the Solar Corona with the SOHO/LASCO Coronagraph
COR-14	Liyun Zhang	A new method of predicting the probability distribution of solar X-ray flares
MAG-1	Lauri Holappa	A new method to estimate contributions of coronal mass ejections and high-speed streams to geomagnetic activity
MAG-2	Reko Hynönen	Variation of ultra-low frequency waves in solar wind and on ground over solar cycle 23
MAG-3	Shabnam Nikbakhsh	Solar active regions complexity effects on Geo-Space environment
MAG-4	Nataliya Nosikova	A trigger for «non-triggered» substorms. A role of ULF waves
MAG-5	Pyry Peitso	Latitudinal variation of geomagnetic activity in solar cycle 24
MAG-6	Timo Qvick	Yearly storm rates in 1933-2014
MAG-7	Linn-Kristine Glesnes Ødegaard	Long term variability in solar cycle and particle fluxes as measured by NOAA POES
CLI-1	Anton Artamonov	parametrization model
CLI-2	Jaša Čalogović	Does a cosmic ray—cloud link operate at local spatial scales?
CLI-3	Tao Chen	Enhancement of High Energy Electron Fluxes and the Variation of the Atmospheric Electric Field in the Antarctic Region
CLI-4	Hana Hanzlíková	Solar wind and sudden stratospheric warmings
CLI-5	Matthieu Kretzschmar	A new database for solar irradiance datasets
CLI-6	Matthieu Kretzschmar	An empirical model of the solar irradiance Lyman-alpha profile
CLI-7	Hui Li	Modulation of Solar Wind Energy Flux on Global Tropical Cyclone Activity
CLI-8	Ville Malinen	QBO-dependent relation of geomagnetic activity and northern annular mode during the 20th century
CLI-9	Mustapha Meftah	Total solar irradiance as measured by the SOVAP radiometer during the solar cycle 24
CLI-10	Courtney Peck	Interpreting irradiance distributions of sub-resolved magnetic structures using high-resolution 3D MHD simulations
CLI-11	Eugene Rozanov	Terrestrial effects of the extreme solar energetic particle event of 774-775 AD
CLI-12	Jan-Erik Solheim	Estimates of the ice edge position in the Barents sea mirrors the solar activity since 1579.
CLI-13	Chi-Ju Wu	Solar total and spectral irradiance reconstruction over last 9000 years
CLI-14	Wei Yuan	FPI observations of nighttime mesospheric and thermospheric winds in China and their comparisons with HWM07
CLI-15	Xinhua Zhao	Correlation between solar variability and variations of the Earth temperature from centuries to ten thousand years