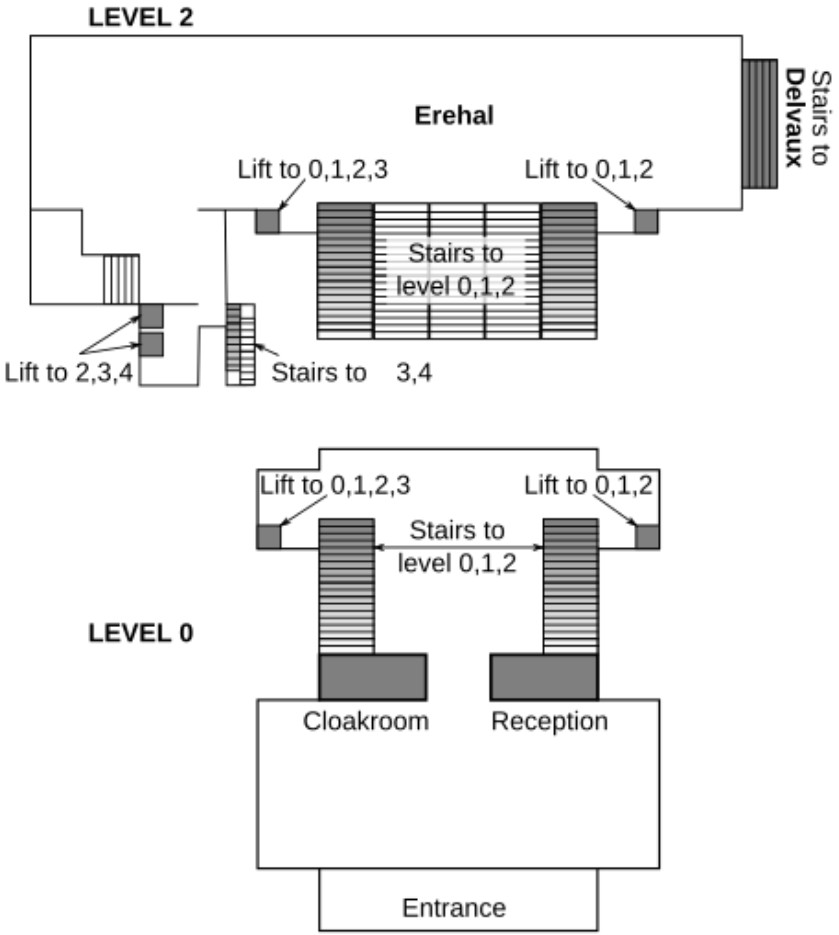
Programme Overview

	Monday 27 Nov	Tuesday 28 Nov	Wednesday 29 Nov	Thursday 30 Nov	Friday 1 Dec
09:00	Registration Coffee	Keynote & Live Forecast 9:00-9:45	Keynote & Live Forecast 9:00-9:45	Keynote & Live Forecast 9:00-9:45	Keynote & Live Forecast 9:00-9:45
09:30		Sessions 4,5,6 9:45-11:00	Sessions 7,8,9 9:45-11:00	Sessions 10,11,12 9:45-11:00	Sessions 13,14,15 9:45-11:00
10:00	Tutorial 10:00-12:00 & Topical Discussions 10:45-12:00				
10:30					
11:00		Posters 1-9 11:00-11:45	Posters 1-9 11:00-11:45	Posters 10-15 11:00-11:45	Posters 10-15 11:00-11:45
11:30		Sessions 4,5,6 11:45-13:00	Sessions 7,8,9 11:45-13:00	Sessions 10,11,12 11:45-13:00	Sessions 13,14,15 11:45-13:00
12:00	Lunch 12:00-13:00				
12:30					
13:00	Opening 13:00-13:45	Lunch 13:00-14:30	Lunch 13:00-14:30	Lunch 13:00-14:00	Lunch 13:00-14:30
13:30					
14:00	Keynote 13:45-14:15			Round Table 14:00-15:00	
14:30	Sessions 1,2,3 14:15-15:30	Keynote 14:30-15:00	Keynote 14:30-15:00		Keynote 14:30-15:00
15:00		Topical Discussions 15:00-16:15	SWWT 15:00-16:30	Topical Discussions 15:00-16:15	Topical Discussions 15:00-16:15
15:30	Posters 1-9				
16:00	Sessions 1,2,3 16:00-17:15	Posters 1-9 16:15-17:15	Coffee	Posters 10-15 16:15-17:15	Coffee 16:15-16:45
16:30					
17:00			Fair 17:00-18:30		
17:30	Topical Discussions 17:15-18:30	Topical Discussions 17:15-18:30		Topical Discussions 17:15-18:30	
18:00					
18:30	—	—	Beer after work 18:30-20:30	—	—
19:00	Medal Ceremony 18:45-19:45				
19:30				Dinner 19:30-22:30	
20:00	Welcome reception 19:45-21:15	Music evening 20:00-22:00			
20:30			—		

Floor Plan

Level 4: Leopold, Mercator, Wellington
Level 3: Ensor, Permeke, Ridderzaal, Stijnen, Lift to level 4
Level 2: Delvaux, Erehal, Lift to level 4
Level 1: Toilets
Level 0: Entrance, Reception desk, Cloakroom



Monday, 27 November 2017

09:00 Registration desk open

09:00 Welcome Coffee

10:00 Start Tutorial
Room: Delvaux

10:45-12:00 Topical Discussion Meetings

Ridderzaal	Mercator
Stakeholder requirements for operational space weather predictions *Yuri Shprits (GFZ Potsdam / UCLA); Irina Zhelavskaya (GFZ Potsdam)*	How can ionospheric products be enhanced to reach better applicability for users? *Claudia Borries (German Aerospace Center)*

12:00 Lunch Break

13:00 Opening and welcome
Room: Delvaux

Keynote

Room: Delvaux

13:45 Recent Advances in Planetary Space Weather
Christina Plainaki

Session 1: Planetary Space Weather Services (part 1)

Chairs: *Nicolas Andre (irap/cnrs); Manuel Grande (aberystwyth university); Jean Lilensten (cnrs/ipag); Iwona Stanislawska (src/pas)*

Room: *Mercator*

14:15 Planetary Space Weather Services for the Europlanet 2020 Research Infrastructure

N. André, M. Grande, and the PSWS Team

14:27 An heliospheric propagation model for solar wind prediction at planets

A. Goutenoir, M. Bouchemit, E. Budnik, C. Tao, N. André, and V. Génot

14:40 Extensions of the CDPP/Propagation tool to the case of comets, giant planet auroral emissions, and catalogues of solar wind disturbances

N. André, V. Génot, A. Rouillard, M. Bouchemit, S. Caussarieu, L. Beigbeder, J.-P. Toniutti, D. Popescu

14:52 The reasons for false alarms at the prediction of high-speed solar wind streams near Earth, and consequences for the prediction at other planets

Stefan Hofmeister, Martin Reiss, Astrid Veronig, Manuela Temmer, Veronique Delouille, Susanne Vennerstrom

15:05 The Hohmann-Parker Effect and HESPERIA: Strategies for Solar Radiation Hazard Predictions Before, During and After Planetary Transits

Arik Posner, Olga Malandraki

15:17 Estimating solar wind speeds from comet ion tail images

Geraint H. Jones, Yudish Ramanjooloo

15:30 Coffee break and Posters Session 1-9

Session 1: Planetary Space Weather Services (part 2)

Chairs: *Nicolas Andre (irap/cnrs); Manuel Grande (aberystwyth university); Jean Lilensten (cnrs/ipag); Iwona Stanislawska (src/pas)*

Room: *Mercator*

16:00 Mars Radiation Surface Model
Nathalia Alzate, Manuel Grande and Daniel Matthiae

16:12 A generalized approach to model the spectra and radiation dose rate of solar particle events in deep space and on the surface of Mars
Jingnan Guo, Cary Zeitlin, Robert F. Wimmer-Schweingruber, Thoren McDole, Patrick Kühl, Jan C. Appel, Bernd Heber, Johannes Krauss, Jan Köhler

16:25 A Transplanet model of magnetosphere-ionosphere coupling at Earth, Mars, Jupiter, (Saturn and Venus)
M. Indurain, A. Goutenoir, M. Bouchemit, M. Gangloff, N. Jourdane, P.-L. Blelly, A. Marchaudon, N. André, and V. Génot

16:37 A software tool for the finding of potential cometary tail crossings
Geraint H. Jones

16:50 Implementation of a Space Weather VOEvent service at IRAP in the frame of Europlanet H2020 PSWS
Michel Gangloff, Nicolas André, Vincent Génot, Baptiste Cecconi, Pierre Le Sidaner, Myriam Bouchemit, Elena Budnik, Nathanaël Jourdane

17:02 mach number and thetabn co-relation classification for space weather
Jivraj Pipaliya

Session 2: Best Practice In Transitioning Existing Space Science Tools To Operational SW Prediction Systems (part 1)

Chairs: *Giovanni Lapenta (KULeuven); David Jackson (Met Office), Suzy Bingham (Met Office);Stefaan Poedts (KUL), Manolis Georgoulis (Athens), Mauro Messerotti (Trieste)*

Room: *Delvaux*

14:15 ADAPT Model R2O Life Cycle: modify, test, repeat - **Invited**
Carl J. Henney, Kathleen Shurkin, C. Nick Arge, David T. MacKenzie, Eric Adamson, Andrew R. Marble

14:45 SWiFT-FORECAST: A physics-based realtime solar wind forecast pipeline
Rui F. Pinto, Alexis P. Rouillard, V. Génot, T. Amari, E. Buchlin, N. Arge

15:00 Open boundary conditions in Lagrangian models of heliosphere.
Vyacheslav Olshevsky, Fabio Bacchini, Stefaan Poedts, Giovanni Lapenta

15:15 Addressing the need for coordinated assessment, development and deployment of operational space weather prediction capabilities
M. Kuznetsova, M.L. Mays, L. Rastaetter, J-S. Shim, Y. Zheng, C. Wiegand, P.J. Macneice

15:30 Coffee break and Posters Session 1-9

Session 2: Best Practice In Transitioning Existing Space Science Tools To Operational SW Prediction Systems (part 2)

Chairs: *Giovanni Lapenta (KULeuven); David Jackson (Met Office), Suzy Bingham (Met Office);Stefaan Poedts (KUL), Manolis Georgoulis (Athens), Mauro Messerotti (Trieste)*

Room: *Delvaux*

16:00 The ESA Virtual Space Weather Modelling Centre – Part 2

Stefaan Poedts and Andrey Kochanov, Andrea Lani and Herman Deconinck, Nicolae Mihalache and Fabien Diet, Daniel Heynderickx, Johan De Keyser, Erwin De Donder, Norma B. Crosby and Marius Echim, Luciano Rodriguez, Robbe Vansina, Freek Verstringe and Benjamin Mampaey, Richard Horne, Sarah Glauert and John Isles, Piers Jiggens, Ralf Keil, Alexi Glover and Juha-Pekka Luntama

16:15 Modeling Ideal Two-Fluid Plasmas: A new approach with COOLFluiD

Nataly Ozak, Alejandro Alvarez Laguna, Andrea Lani, Yana Maneva, Stefaan Poedts

16:30 A probabilistic implementation for the Drag-Based Model

Dario Del Moro, Gianluca Napoletano, Roberta Forte, Ermanno Pietropaolo, Luca Giovannelli, Francesco Berrilli

16:45 Developing an improved Aurora prediction model for operational use

Diana Morosan, David Jackson, Suzy Bingham and Rodney Viereck

17:00 Best practices for validating and transitioning to operations the space weather services offered by University of Alcala through SeNMEs portal.

Antonio Guerrero,Consuelo Cid,Judith Palacios, Elena Saiz, Yolanda Cerrato

Session 3: Ground-based Instruments for Advanced Space Weather Projects (part 1)

Chairs: *Francesca Zuccarello (University of Catania); Francesco Berrilli (University of Roma Tor Vergata); Paola De Michelis (Istituto Nazionale di Geofisica e Vulcanologia); Stuart Jefferies (University of Hawaii).*

Room: *Ridderzaal*

14:15 Welcome and presentation of the Session
Francesca Zuccarello

14:20 Science with the European Solar Telescope - **Invited**
M. J. Martínez González

14:40 Event based verification of the automatic flare detection system at Kanzelhöhe Observatory
Werner Pötzi, Astrid Veronig

14:50 Investigation of Heliospheric Faraday Rotation Due to a Coronal Mass Ejection (CME) Using the LOw Frequency ARray (LOFAR) and Space-Based Imaging Techniques
Mario M. Bisi, Elizabeth A. Jensen, Richard A. Fallows, Charlotte Sobey, Brian Wood, Bernard V. Jackson, Alessandra Giunta, David Barnes, P. Paul L. Hick, Tarraneh Eftekhari, Hsiu-Shan Yu, Dusan Odstrcil, Munetoshi Tokumaru, Caterina Tiburzi, and Joris Verbiest.

15:00 The SAMM project
Roberto Piazzesi, Marco Stangalini, Roberto Speziali

15:10 SPRING - Proposed Instrument Concept - **Invited**
Roth Markus, Gosain Sanjay, Hill Frank, Thompson Michael

15:30 Coffee break and Posters Session 1-9

Session 3: Ground-based Instruments for Advanced Space Weather Projects (part 2)

Chairs: *Francesca Zuccarello (University of Catania); Francesco Berrilli (University of Roma Tor Vergata); Paola De Michelis (Istituto Nazionale di Geofisica e Vulcanologia); Stuart Jefferies (University of Hawaii).*

Room: *Ridderzaal*

16:00 Comprehensive analysis of the Geoeffective Solar Event of June 21, 2015: Effects on the Magnetosphere, Plasmasphere and Ionosphere Systems - part 1

Mirko Piersanti, Tommaso Alberti, Alessandro Bemporad, Francesco Berrilli, Roberto Bruno, Vincenzo Capparelli, Vincenzo Carbone, Claudio Cesaroni, Giuseppe Consolini, Alice Cristaldi, Alfredo Del Corpo, Dario Del Moro, Simone Di Matteo, Ilaria Ermolli, Silvano Fineschi, Fabio Giannattasio, Fabrizio Giorgi, Luca Giovannelli, Salvatore Luigi Guglielmino, Monica Laurenza, Fabio Lepreti, Maria Federica Marcucci, Matteo Martucci, Matteo Mergè, Michael Pezzopane, Ermanno Pietropaolo, Paolo Romano, Roberta Sparvoli, Luca Spogli, Marco Stangalini, Antonio Vecchio, Massimo Vellante, Umberto Villante, Francesca Zuccarello.

16:10 Comprehensive analysis of the Geoeffective Solar Event of June 21, 2015: Effects on the Magnetosphere, Plasmasphere and Ionosphere Systems - part 2

Mirko Piersanti, Tommaso Alberti, Alessandro Bemporad, Francesco Berrilli, Roberto Bruno, Vincenzo Capparelli, Vincenzo Carbone, Claudio Cesaroni, Giuseppe Consolini, Alice Cristaldi, Alfredo Del Corpo, Dario Del Moro, Simone Di Matteo, Ilaria Ermolli, Silvano Fineschi, Fabio Giannattasio, Fabrizio Giorgi, Luca Giovannelli, Salvatore Luigi Guglielmino, Monica Laurenza, Fabio Lepreti, Maria Federica Marcucci, Matteo Martucci, Matteo Mergè, Michael Pezzopane, Ermanno Pietropaolo, Paolo Romano, Roberta Sparvoli, Luca Spogli, Marco Stangalini, Antonio Vecchio, Massimo Vellante, Umberto Villante, Francesca Zuccarello

16:20 The MOTH Doppler-magnetographs and data calibration pipeline

Roberta Forte, Ermanno Pietropaolo, Stuart Jefferies, Dario Del Moro, Luca Giovannelli, Maurizio Oliviero, Francesco Berrilli

16:30 Worldwide network of particle detectors SEVAN: 10 years of operation - **Invited**

V.Babayan, A.Chilingarian, T.Karapetyan, B.Mailyan and M.Zazyan

16:50 Neutron Monitors for Space Weather

Anatoly Belov,Eugenia Eroshenko,Victor Yanke, Artem Abunin,Maria Abunina,Raisa Gushchina,Victoria Oleneva,Dimitra Lingri,Helen Mavromichalaki

17:00 ORCA: A new instrument for Space Weather

J.J. Blanco, O. García-Población, J. Medina, I. García-Tejedor, M. Prieto, G. Díaz-Romeral, S. Ayuso, R. Gómez-Herrero, J. A. Garzón, A. Gomis, V. Villasante-Marcos, M. Seco, A. Morozova, G. Kornakov, T. Kurtukian, A. Blanco, D. González-Diaz, B. Heber, C. Steigies and H. Kruger.

17:10 Conclusions and Recap

Francesca Zuccarello

17:15-18:30 Topical Discussion Meetings

Delvaux	Ridderzaal	Mercator
Cosmic-ray modulation by solar wind structures	Stakeholder Requirements for a Community Coordinated Satellite Anomaly Database	Metrics, verification and validation for space weather applications
Catia Grimani (University of Urbino "Carlo Bo")	*Janet Green (Space Hazards Applications); Yuri Shprits (GFZ Potsdam)*	*Alexi Glover (ESA); Matthew Angling (University of Birmingham), Mark Dierckxsens (BIRA-IASB), Suzy Bingham (Met Office, UK)*

18:45-19:45 Medal Ceremony

Room Delvaux

19:45-21:15 Welcome Reception

Erehal @ Kursaal

Tuesday, 28 November 2017

Keynote & Live Forecast

Room: Delvaux

09:00 Kristian Birkeland - The Almost Forgotten Scientist and Father of the Sun-Earth Connection
Pål Brekke

09:30 Live Forecast

Session 4: The role of Interplanetary Coronal Mass Ejections in Space Weather (part 1)

Chairs: Luciano Rodriguez (ROB); Sergio Dasso (IAFE/UBA)
Room: Delvaux

09:45 EUHFORIA: Current Status and Path Towards Modeling the Evolution of the Magnetic Structure of Coronal Mass Ejections - **Invited**
Jens Pomoell, Christine Verbeke, Eleanna Asvestari, Camilla Scolini, Stefaan Poedts, Emilia Kilpua, Manuela Temmer, Nicolas Wijsen, Erkka Lumme, Alexey Isavnin, Erika Palmerio, Jasmina Magdalenic

10:15 Probabilistic model for heliospheric propagation of Interplanetary Coronal Mass Ejections: Drag-based ensemble model (DBEM)
Mateja Dumbovic, Jasa Calogovic, Bojan Vrsnak, Manuela Temmer, Astrid Veronig, Leila M. Mays

10:30 Forecasting the arrival time of the CME's shock at the Earth
Evangelos Paouris, Helen Mavromichalaki

10:45 Observations and Simulations of the Sun to Earth Evolution of a STEREO-Era Set of Earth-Impacting CMEs and their In Situ Magnetic Field
Christina Kay, Nat Gopalswamy

Session 5: Aviation Meets Space Weather - Roadmap Towards Space Weather Services for Aviation (part 1)

Chairs: *Marcin Latocha (Seibersdorf Laboratories), Erwin de Donder (BIRA-IASB), Claudia Borries (DLR), Peter Beck (Seibersdorf Laboratories), Norma B. Crosby (BIRA-IASB).*

Room: *Ridderzaal*

09:45 The real-time SEP prediction tools within the framework of the 'HESPERIA' HORIZON 2020 project
O. E. Malandraki, M. Nunez, B. Heber, J. Labrenz, A. Posner, N. Milas, G. Tsiropoula, E. Pavlos

10:00 Application of neutron monitor data for assessment of aircrew exposure
Alexander Mishev, Ilya Usoskin

10:20 A tool for space radiation exposure calculations for aviators
Pavlos Paschalis, Anastasia Tezari, Maria Gerontidou, Helen Mavromichalaki

10:40 Improving nowcast and forecast of radiation effects due to Solar Energetic Particles – a roadmap for developments.
Marcin Latocha, Rolf Bütikofer, Peter Beck

Session 6: Space Weather Policy, Key Drivers, and Prime Opportunities (part 1)

Chairs: *Mike Hapgood (RAL Space); Terry Onsager (NOAA), Edward Oughton (Judge Business School, Cambridge); Hermann Opgenoorth (IRF/MSB), Catherine Burnett (Met Office); Mario M. Bisi (RAL Space); Jean Lilensten (Grenoble)*

Room: *Mercator*

09:45 An Operational Scheme for Establishing a National Space Weather Infrastructure - **Invited**
Mauro Messerotti

10:05 Solar Storms – A risk perspective from the insurance industry - **Invited**
Eichner Jan

10:25 Space weather event impacts on South African technology - **Invited**
Rendani Nndanganeni, Lee-Anne McKinnell, Mpho Tshisaphungo and Michael Kosch

10:45 Space weather engagement links with societal and economic risks
Iwona Stanislawska, Zbigniew Klos

11:00 Coffee break and Posters Session 1-9

Session 4: The role of Interplanetary Coronal Mass Ejections in Space Weather (part 2)

Chairs: *Luciano Rodriguez (ROB); Sergio Dasso (IAFE/UBA)*

Room: *Delvaux*

11:45 LOFAR Observations of the Full Passage of a CME
Richard Fallows, Mario Bisi, Golam Shaifullah, Caterina Tiburzi and Gemma Janssen

12:00 The properties of CMEs embedded in extreme solar wind
Consuelo Cid, Judith Palacios, Antonio Guerrero, Elena Saiz, Yolanda Cerrato

12:15 Quantification of disturbance periods of solar wind speed in interplanetary space due to coronal mass ejections
Manuela Temmer, Reiss Martin A., Nikolic Ljubomir, Hofmeister Stefan J., Veronig Astrid

12:30 Plasma diagnostics of CMEs via coronal dimming regions
Astrid M. Veronig, Kamalam Vanninathan, Karin Dissauer, Manuela Temmer

12:45 Inferring ICME Magnetic Fields at 1 AU and Elsewhere: the H-CME Method
Manolis K. Georgoulis, Spiros Patsourakos

Session 5: Aviation Meets Space Weather - Roadmap Towards Space Weather Services for Aviation (part 2)

Chairs: *Marcin Latocha (Seibersdorf Laboratories), Erwin de Donder (BIRA-IASB), Claudia Borries (DLR), Peter Beck (Seibersdorf Laboratories), Norma B. Crosby (BIRA-IASB).*

Room: *Ridderzaal*

11:45 The impact of space weather on aviation sector in South Africa
Rendani Nndanganeni, Mpho Tshisaphungo

12:00 Working on space-wx for the pilots' association: Lessons learned
Klaus Sievers

12:20 "Reasonably achievable" - first action plans for ALARA
Theresia Eberbach

12:40 European Aviation Safety Agency, role with regard to Space Weather and aviation - **Invited**
Chris Tyson

Session 6: Space Weather Policy, Key Drivers, and Prime Opportunities (part 2)

Chairs: *Mike Hapgood (RAL Space); Terry Onsager (NOAA), Edward Oughton (Judge Business School, Cambridge); Hermann Opgenoorth (IRF/MSB), Catherine Burnett (Met Office); Mario M. Bisi (RAL Space); Jean Lilensten (Grenoble)*

Room: *Mercator*

11:45 UK Government preparation for a severe space weather storm - **Invited**
Claudia Lally

12:05 Towards Enhanced Space Weather Preparedness: U.S. Space Weather Policies - **Invited**
Seth Jonas, William Murtagh

12:25 Panel Discussion
Mike Hapgood

13:00-14:30 Lunch Break

Keynote

Room: *Delvaux*

14:30 The Kristian Birkeland medal for Space Weather and Space Climate
Winner of the Birkeland Medal

15:00-16:15 Topical Discussion Meetings

Delvaux	Ridderzaal	Mercator
Applications of neutron monitors to space-weather and NMDB working meeting	How to assess space environment models' capability in satellite impact analysis	Forecaster Forum
Danislav Sapundjiev (Royal Meteorological Institute); Christian T. Steigies (University of Kiel); Rolf Bütikofer (University of Bern); Karl-Ludwig Klein (Paris Observatory)	*Yihua Zheng (NASA/GSFC); Natalia Ganjushkina; Piers Jiggens; Yuri Shprits; Dave Pitchford*	*Larisa Trichtchenko; Shaun Bloomfield; Ljubomir Nicolic*

16:15-17:15 Coffee break and Posters Session 1-9

17:15-18:30 Topical Discussion Meetings

Delvaux	Ridderzaal	Mercator
Discussion for potential cooperation for mitigating satellite anomaly *Mamoru Ishii (National Institute of Information and Communications Technology)*	Advance Predictions of Solar Wind Conditions at L1: Quantifying Performance *M. Leila Mays (NASA GSFC); Christine Verbeke (KU Leuven); Matthew J West (ROB); Barbara Thompson (NASA GSFC); Christian Moestl (Space Research Centre Graz); Neel Savani (UMBC/NASA GSFC)*	Recent and Future Radiation Environment Specification Modelling *Piers Jiggens (European Space Research And Technology Centre); Ingmar Sandberg (SPARC); Paul O'Brien (Aerospace Corporation); Eamonn Daly (ESA)*

20:00-22:00 Music evening

Lounge Bar @ Kursaal

Wednesday, 29 November 2017

Keynote & Live Forecast

Room: Delvaux

09:00 Lessons Learned from the first educational CubeSat Constellation
Davide Masutti

09:30 Live Forecast

Session 7: Joint session with CubeSat Symposium (part 1)

Chairs: Davide Masutti (VKI)
Room: Ridderzaal

09:45 The UNSW-EC0 Mission: Overview of the Recovery, Commissioning and Mission Plan
Aboutanios

10:00 Experiences and Lessons Learned with the QB50 Satellite Control System
Yann Voumard

10:15 Early Operation results of LINK - Little Intelligent Nanosatellite of KAIST
Yeerang Lim

10:30 Lessons learned from the Challenger Mission on QB50
Palo

10:45 In-orbit ADCS Commissioning Results of the QB50 CubeSat nSight-1
Steyn

Session 8: Space Systems Engineering: Space Climate Modelling and the Effects of Severe Space Weather Events (part 1)

Chairs: *Eamonn Daly (European Space Agency); Richard Horne (British Antarctic Survey); Daniel Heynderickx (DH Consultancy); Hugh Evans (European Space Agency); Dave Pitchford (SES), Nigel Meredith (British Antarctic Survey); F. Lei (RadMod Research)*

Room: *Delvaux*

09:45 Methodology and Data Sources for Assessing Extreme Space Weather Events
Linda Neergaard Parker, Joseph I. Minow

10:05 Extreme relativistic electron fluxes in the Earth's outer radiation belt: Analysis of INTEGRAL IREM data
Nigel P. Meredith, Richard B. Horne, Ingmar Sandberg, Constantinos Papadimitriou and Hugh D. R. Evans

10:20 Extreme events in the Earth's electron radiation belts
Sarah A Glauert, Richard B. Horne, Nigel P. Meredith

10:40 Low energy electron radiation environment for extreme events
Natalia Ganushkina, Stepan Dubyagin

Session 9: The role of solar radio observations in Space Weather science (part 1)

Chairs: *Jasmina Magdalenic (ROB), Alexander Nindos (Univ. of Ioannina), Manuela Temmer (Uni-Graz)*

Room: *Mercator*

09:45 Radio observations of solar flare electron acceleration - **Invited**
Marina Battaglia

10:05 Study of the signature of a coronal shock with LOFAR and multi-viewpoint observations, space weather implications.
Pietro Zucca, Diana Morosan, Peter T. Gallagher, Richard Fallows, Alexis Rouillard, Jasmina Magdalenic, Christian Vocks, Christophe Marqué, Karl-Ludwig Klein, and Gottfried Mann

10:20 Coronal mass ejections and their interplanetary radio signatures - **Invited**
Silja Pohjolainen

10:40 Multi-viewpoint Observations of a Widely Distributed Solar Energetic Particle Event: the Role of EUV Waves and Shock Signatures
Alexander Nindos, Athanasios Kouloumvakos, Spiros Patsourakos, Angelos Vourlidas, Anastasios Anastasiadis, Alexander Hillaris, Ingmar Sandberg

11:00 Coffee break and Posters Session 1-9

Session 7: Joint session with CubeSat Symposium (part 2)

Chairs: Davide Masutti (VKI)
Room: Ridderzaal

11:45 Development of the InflateSail (QB50 GB06) 3U CubeSat Technology Demonstrator and First Flight Results
Underwood

12:00 Analysis of PHOENIX CubeSat under High Tumbling Rate
Ming-Yang Hong

12:15 Nanosatellite Polyitan-2-SAU as a continuation of Ukrainian Cubesats program
Kovalenko

12:30 From mission verification to mission operations: QB50/PHOENIX lessons learned and recommendations
Vannitsen

12:45 Lessons learned from Two Turkish QB50 satellites
Aslan

Session 8: Space Systems Engineering: Space Climate Modelling and the Effects of Severe Space Weather Events (part 2)

Chairs: *Eamonn Daly (European Space Agency); Richard Horne (British Antarctic Survey); Daniel Heynderickx (DH Consultancy); Hugh Evans (European Space Agency); Dave Pitchford (SES), Nigel Meredith (British Antarctic Survey); F. Lei (RadMod Research)*

Room: *Delvaux*

11:45 Analysis of internal charging processes in extreme MEO electron environment - **Invited**
T. Paulmier, B. Dirassen, R. Rey, K. Ryden, R.Horne

12:10 First results from the Timepix radiation monitor in Low Earth Orbit
Stefan Gohl, Benedikt Bergmann, Stanislav Pospisil

12:30 The AE9/AP9 Radiation and Plasma environment models - **Invited**
T.P. O'Brien, W.R. Johnston, S.L. Huston, T.B. Guild, Y.-J. Su, C. Roth, R. Quinn

Session 9: The role of solar radio observations in Space Weather science (part 2)

Chairs: *Jasmina Magdalenic (ROB), Alexander Nindos (Univ. of Ioannina), Manuela Temmer (Uni-Graz)*

Room: *Mercator*

11:45 Simultaneous Near-Sun Observations of a Moving Type IV Radio Burst and the Associated White-Light Coronal Mass Ejection
K. Hariharan, R. Ramesh, C. Kathiravan, T.J. Wang

12:00 Solar radio bursts as space weather hazard and as a space weather prediction tool - **Invited**
Karl-Ludwig Klein

12:20 The Radio Telescope LOFAR as a Novel Tool for Space Weather
Gottfried Mann and Christian Vocks

12:35 3D-MHD Modeling Using Interplanetary Scintillation (IPS) Observations
Bernard V. Jackson, Hsiu-Shan Yu, P. Paul Hick, Andrew Buffington, Mario M. Bisi, Dusan Odstrcil, Tae. Kim, Nick Pogorelov, Munetoshi Tokumaru, Jaehun Kim, and Jongyeon Yun

12:50 The Worldwide Interplanetary Scintillation (IPS) Stations (WIPSS) Network: Initial Results from the October 2016 Space-Weather Campaign
Mario M. Bisi, Bernard V. Jackson, Richard A. Fallows, Munetoshi Tokumaru, Ernesto Aguilar-Rodriguez, J. Americo Gonzalez-Esparza, Julio C. Mejia-Ambriz, Igor Chashei, Sergey Tyul'bashev, John Morgan, Periasamy K. Manoharan, Oyuki Chang, Hsiu-Shan Yu, Dusan Odstrcil, David Barnes, and Biagio Forte.

13:00-14:30 Lunch Break

Keynote

Room: Delvaux

14:30 Highlights on Extreme Space Weather from the SPACESTORM Project
Richard Horne

15:00-16:30 Topical Discussion Meeting

Delvaux
Space Weather Working Team : general meeting

16:30-17:00 **Coffee**
Poster area

17:00-18:30 **Fair**
Poster area

18:30-20:30 **Beer after work**
Poster area

Thursday, 30 November 2017

Keynote & Live Forecast

Room: Delvaux

09:00 More steps towards L5
Robert Bentley

09:30 Live Forecast

Session 10: ICME and SEPs throughout the Heliosphere: multi-spacecraft observations and data-driven modeling (part 1)

Chairs: Jingnan Guo (Univ of Kiel); Christian Moestl (Space Research Centre Graz); Mateja Dumbovic (Univ of Zagreb); Nina Dresing (Univ of Kiel); Markus Battarbee (Univ of Central Lancashire)

Room: Mercator

09:45 Statistical methods for the optimal planning of multi spacecraft missions to monitor space weather. - **Invited**
G. Lapenta, M. E. Innocenti, C. Skandrani, F. Crespon, J. Lamouroux

10:09 Statistical Properties of the 20 Largest SEP Events
Yihua Zheng, Mary Aronne

10:26 Long-lasting solar energetic electron injection during the 26 Dec 2013 widespread SEP event
N.Dresing, A. Klassen, B. Heber, R. Gómez-Herrero, M. Temmer and A. Veronig

10:43 Why is solar cycle 24 an inefficient producer of high-energy particle events?
Rami Vainio, Osku Raukunen, Allan J. Tylka, William F. Dietrich, Alexandr Afanasiev

Session 11: Space Weather effects in the ionosphere and thermosphere: advances in monitoring, modeling and mitigation techniques (part 1)

Chairs: Anna Belehaki (NOA); Jean Lilensten (IPAG/CNRS)
Room: Delvaux

09:45 Long-term variations of exospheric temperature inferred from foF1 observations
Andrei Mikhailov, Loredana Perrone

10:00 Northern scintillations characteristics and impacts on SBAS behavior: EGNOS Case
Ridha Chaggara, Claudia Paparini, Ulrich Ngayap-Youmbi, Bernard Duparc, Sandro Maria Radicella, Luigi Ciraolo

10:15 Extremely intense ionospheric ion escape during severe ICMEs
M. Yamauchi, R. Slapak, A. Schillings, and H. Nilsson

10:30 The Australian Bureau of Meteorology Activities for the Ionospheric Modelling: A Regional Approach
Z. Bouya, M. Terkildsen P. Maher, V. Kumar, G. Patterson

10:45 The modification of the ionosphere over the thunderstorm area
Jan Blecki, Ewa Slomińska, Jan Slomiński, Roman Wronowski, Andrzej Kulak, Janusz Mlynarczyk, Roger Haagmans, Michel Parrot

Session 12: Enhanced Space Weather Monitoring System (LAGRANGE MISSIONS & D3S) (part 1)

Chairs: Stefan Kraft (ESA - ESOC); Steven W. Clarke (NASA)
Room: Permeke

09:45 Enhanced Space Situational Awareness from L5 - **Invited**
Alexi Glover, Stefan Kraft, Juha-Pekka Luntama

10:05 A remote-sensing package for ESA's enhanced space-weather monitoring system
Jackie Davies, Paul Eccleston, Richard Harrison, Ian Tosh, David Berghmans, Matthew West, Jean-Herve Lecat, Peter Barthol, Achim Gandorfer, Sami Solanki

10:25 In-situ environment monitoring by space weather missions to the Sun-Earth Lagrange points
Dhiren Kataria

10:45 A Wide-Field Coronal EUV Imager-Spectrometer for Improved Space Weather Forecasting
Leon Golub

11:00 Coffee break and Posters Session 10-15

Session 10: ICME and SEPs throughout the Heliosphere: multi-spacecraft observations and data-driven modeling (part 2)

Chairs: *Jingnan Guo (Univ of Kiel); Christian Moestl (Space Research Centre Graz); Mateja Dumbovic (Univ of Zagreb); Nina Dresing (Univ of Kiel); Markus Battarbee (Univ of Central Lancashire)*

Room: *Mercator*

11:45 Creating an index for Solar Energetic Particle (SEP) events using multivariate analysis
A. Papaioannou, A. Anastasiadis, M. Paassilta, R. Vainio, E. Valtonen, A. Kouloumvakos, A. Belov, E. Eroshenko, V. Yanke, M. Abunina, A. Abunin

12:02 Interplanetary coronal mass ejection observed at STEREO-A, Mars, comet 67P/Churyumov-Gerasimenko, Saturn, and New Horizons en-route to Pluto. Comparison of its Forbush decreases at 1.4, 3.1 and 9.9 AU - **Invited**
Olivier Witasse, Beatriz Sanchez-Cano, M.Leila Mays, Primoz Kajdic, Hermann Opgenoorth, Heather Elliott, Ian Richardson

12:26 Forbush Decreases and Interplanetary Coronal Mass Ejections at Earth and Mars
Mark Lester, Beatriz Sanchez-Cano, Emma Thomas, Adam Langeveld, Jingnan Guo, Hermann Opgenoorth

12:43 CME dynamics using STEREO and LASCO observations: relative importance of Lorentz forces and solar wind drag
Nishtha Sachdeva, Prasad Subramanian, Angelos Vourlidas, Volker Bothmer

Session 11: Space Weather effects in the ionosphere and thermosphere: advances in monitoring, modeling and mitigation techniques (part 2)

Chairs: Anna Belehaki (NOA); Jean Lilensten (IPAG/CNRS)
Room: Delvaux

11:45 Specifying the background ionospheric conditions for scientific and operational applications
Ioanna Tsagouri, Ja Soon Shim, Maria M. Kusnetsova, Ivan Galkin, Bruno Zolesi, Anna Belehaki, Kostas Koutroumbas and Kostas Themelis

12:00 Geomagnetic and Ionospheric data from the Swarm Mission for the ESA's SSA SWE Service Network
Guram N. Kervalishvili, Claudia Stolle, Jan Rauberg, Jürgen Matzka, Stefanie Weege, Mirjam Langhans, Nils Olsen, Susanne Vennerstrøm, Magnar G. Johnsen, Chris Hall

12:15 New insights into structure of the mid-latitude Ionosphere using LOFAR
Richard Fallows, Maaijke Mevius, Biagio Forte, Sebastiaan van der Tol, and Mario Bisi

12:30 The ESCAPE M5 mission: first-time systematic study of Thermosphere/Exosphere/Ionosphere for various solar and solar wind conditions

Iannis Dandouras, Masatoshi Yamauchi, Henri Rème, Johan De Keyser, Octav Marghitu, Andrew Fazakerley, Benjamin Grison, Lynn Kistler, Anna Milillo, Rumi Nakamura, Nicolaos Paschalidis, Antonis Paschalis, Jean-Louis Pinçon, Takeshi Sakanoi, Martin Wieser, Peter Wurz, Ichiro Yoshikawa, Ingemar Häggström, Mike Liemohn, Feng Tian, Ioannis Daglis and the ESCAPE proposal team

12:45 Ionospheric impact on Biomass ESA mission

Lucilla Alfonsi, Gabriella Povero, Luca Spogli, Claudio Cesaroni, Cathryn N.Mitchell, Robert Burston, Sreeja Veettil, Marcio Aquino, Virginia Klausner, Marcio Muella, Michael Pezzopane, Alessandra Giuntini,Biagio Forte, Marco Pini, La The Vinh, Ta Hai Tung, Asnawi Husin, Sri Ekawati, Charisma Victoria de la Cruz-Cayapan, Mardina Abdullah, Noridawaty Mat Daud, Minh Le Huy, Nicolas Floury

Session 12: Enhanced Space Weather Monitoring System (LAGRANGE MISSIONS & D3S) (part 2)

Chairs: Stefan Kraft (ESA - ESOC); Steven W. Clarke (NASA)
Room: Permeke

11:45 ASHI: An All Sky Heliospheric Imager for Viewing Thomson-Scattered Light

Bernard V. Jackson, Andrew Buffington, Hsiu-Shan Yu, P. Paul Hick, and Mario M. Bisi

12:05 Small Satellite Constellation for ESA's Distributed Space Weather3S

Federico Gardosi, Nicolas Faber, Hubert Moser, Pierre Morin, Marino Poppé

12:25 SMILE: A Novel and Global Way to Explore Solar-Terrestrial Relationships

Graziella Branduardi-Raymont, Chi Wang, Steve Sembay, Lei Dai, Lei Li, Eric Donovan, Tianran Sun, Dhiren Kataria, Rumi Nakamura, Huigen Yang, Andrew Read, Emma Spanswick, David Sibeck, Kip Kuntz, Philippe Escoubet, David Agnolon, Walfried Raab, Jianhua Zheng

12:45 Ground Level Event Monitor – an energetic particle instrument in interplanetary medium

Heber, B., Casolino, M., Blanco Avalos, J., Wimmer-Schweingruber, R.

13:00-14:00 Lunch Break

Round Table

Room: Delvaux

14:00 Round Table

15:00-16:15 Topical Discussion Meetings

Delvaux	Mercator	Permeke
SSA Space Weather Network Event	Atmospheric Effects topical group meeting *Sean Bruinsma (CNES)*	Harmonisation of SEP Data Calibrations (HSDC) *Ingmar Sandberg (SPARC); Piers Jiggens (ESTEC/ESA); Daniel Heynderickx (DH Consultancy), Juan Rodriguez (NOAA, CIRES)*

16:15-17:15 Coffee break and Posters Session 10-15

17:15-18:30 Topical Discussion Meetings

Delvaux	Mercator	Permeke
SSA Space Weather Network Event	Assessing the need to further integrate upper atmosphere facilities for improved specification of space weather effects and for space climate research advances *Anna Belehaki (National Observatory of Athens); Jean Lilensten (IPAG/CNRS, France)*	High-energy Solar Energetic Particle Events *Athanasios Papaioannou (National Observatory of Athens), Stepan Poluianov (University of Oulu), Alex Mishev (University of Oulu)*

18:55 Joint departure for the dinner in front of Het Kursaal

19:30-22:00 **Dinner @ Versluys Arena**
Leopold Van Tyghemlaan, 62
8400 Oostende

Friday, 1 December 2017

Keynote & Live Forecast

Room: Delvaux

09:00 Identification of travelling ionospheric disturbances and perspectives for the development of warning services
Anna Belehaki

09:30 Live Forecast

Session 13: System Science: Application to space weather analysis, modelling and forecasting (part 1)

Chairs: Richard Boynton (Univ of Sheffield); Homayon Aryan (Goddard Space Flight Center); George Balasis (IAASARS, NOA); Enrico Camporeale (CWI)

Room: Delvaux

09:45 Understanding performance of neural network models for short-term predictions applied to geomagnetic indices - **Invited**
Peter Wintoft, Magnus Wik

10:10 Automatically worked stages for estimation of the level of expected radiation hazards from SEP events
Lev Dorman and Lev Pustil'nik

10:30 Empirical modeling of the plasmasphere dynamics using neural networks
Irina Zhelavskaya,Yuri Shprits,Maria Spasojevic

10:45 Variation of geomagnetic responses to the solar wind input: Half-year increase during declining phases and 2009 specialty
M. Yamauchi and B. Olsthoorn

Session 14: Multi-viewpoint versus single-viewpoint observations and modelling - Lessons learned from 10 years of STEREO (part 1)

Chairs: *Barbara Thompson (NASA GSFC); Manuela Temmer (University of Graz); Jackie Davies (RAL Space); Volker Bothmer (University of Göttingen); Alexis Rouillard (IRAP); Stefaan Poedts (KU Leuven)*

Room: *Mercator*

09:45 3D reconstructions of EUV wave fronts using multi-point STEREO observations

Tatiana Podladchikova, Astrid M. Veronig, Karin Dissauer

10:00 Non-linear two-fluid simulation of a coronal loop

Alejandro Alvarez Laguna, Nataly Ozak, and Stefaan Poedts

10:15 Predicting the solar wind based on the principle of co-rotation

Susanne Vennerstrom, Astrid M. Veronig, Manuela Temmer, Stefan Hofmeister and Stephan G. Heinemann

10:30 Modeling Coronal Mass Ejections with EUHFORIA: A Parameter Study of the Gibson-Low Flux Rope Model using multi-viewpoint observations

Christine Verbeke, Eleanna Asvestari, Camilla Scolini,Jens Pomoell, Stefaan Poedts, Emilia Kilpua

10:45 STEREO observational constraints and initialization for the coupled ENLIL+SEPMOD models

M. L. Mays, J. G. Luhmann, H. M. Bain, Y. Li, D. Odstrcil, C. O. Lee, Lan Jian, R. A. Mewaldt, A.B. Galvin

Session 15: Ground-based Operational and Infrastructure Impacts of Space Weather (part 1)

Chairs: *Ellen Clarke (BGS), Gemma Richardson (BGS)*
Room: *Permeke*

09:45 Space Weather Research Program focused on the Energy Sector in the UK - **Invited**
Alexis Ruffenach

10:15 Modelling electric fields in Ireland and UK for space weather applications
Joan Campanyà, Peter Gallagher, Seán Blake, Mark Gibbs, David Jackson, Ciarán Beggan, Gemma S. Richardson, Colin Hogg

10:30 Planning new improvements for modelling and measuring geomagnetically induced currents in Spain
J. Miquel Torta, Alex Marcuello, Joan Campanyà, Santiago Marsal, Pilar Queralt, Juanjo Ledo

10:45 Simulations of GICs in the Fully Resolved Irish Power Network over 25 Years
Sean Blake, Peter T. Gallagher, Joe McCauley, Joan Campanya, Alan G. Jones, Colin Hogg, Ciaran D. Beggan, Alan W.P Thomson, Gemma S. Richardson, David Bell

11:00 Coffee break and Posters Session 10-15

Session 13: System Science: Application to space weather analysis, modelling and forecasting (part 2)

Chairs: *Richard Boynton (Univ of Sheffield); Homayon Aryan (Goddard Space Flight Center); George Balasis (IAASARS, NOA); Enrico Camporeale (CWI)*

Room: *Delvaux*

11:45 Global Solar Magnetic Maps and Forecasting Space Weather with ADAPT

Carl J. Henney, Kathleen Shurkin, C. Nick Arge

12:05 Use of systems based models for the forecasting of space weather

S. N. Walker, T. Arber, K. Bennett, M. Liemohn, B. van der Holst, P. Wintoft, N. Y. Ganushkina, and M. A. Balikhin

12:25 Evidence on second-order phase transition of the magnetosphere around magnetic storms

Georgios Balasis, Ioannis A. Daglis, Yiannis Contoyiannis, Stelios M. Potirakis, Constantinos Papadimitriou, Nikolaos S. Melis, Omiros Giannakis, Athanassios Papaioannou, Anastasios Anastasiadis, and Charalampos Kontoes

12:45 Tracking and characterizing the evolution of active regions with SDO/HMI

Raphael Attie, Barbara Thompson, Veronique Delouille

Session 14: Multi-viewpoint versus single-viewpoint observations and modelling - Lessons learned from 10 years of STEREO (part 2)

Chairs: *Barbara Thompson (NASA GSFC); Manuela Temmer (University of Graz); Jackie Davies (RAL Space); Volker Bothmer (University of Göttingen); Alexis Rouillard (IRAP); Stefaan Poedts (KU Leuven)*

Room: *Mercator*

11:45 Observations of the drivers of space weather with coronal and magnetic imagers - **Invited**
Neal Hurlburt, Alan Title, James Lemen and Cathy Chou

12:15 New strategies for modelling and forecasting the background solar wind combined with multi-point observations
Rui F. Pinto, Alexis P. Rouillard, D. Odstrcill, L. Mays

12:30 Kinematics, shock locations and properties of a CME driven shock using LOFAR and multi-viewpoint observations.
Pietro Zucca, Diana Morosan, Peter T. Gallagher, Richard Fallows, Alexis Rouillard, Jasmina Magdalenic, Christian Vocks, Christophe Marqué, Karl-Ludwig Klein, and Gottfried Mann

12:45 Verification of real-time WSA-ENLIL+Cone simulations of CME arrival-time at the CCMC/SWRC
Alexandra M. Wold, M. Leila Mays, A.Taktakishvili, L. Jian, D.Odstrcil, P. MacNeice

Session 15: Ground-based Operational and Infrastructure Impacts of Space Weather (part 2)

Chairs: *Ellen Clarke (BGS), Gemma Richardson (BGS)*

Room: *Permeke*

11:45 Recent advances and validation of GIC modelling in the UK
Gemma Richardson, Ciaran Beggan, Alan Thomson

12:00 Long term Geomagnetically Induced Current Observations in New Zealand: Earth return Corrections and Geomagnetic Field Driver

Daniel Mac Manus, Craig Rodger,Michael Dalzell,Alan Thomson,Mark Clilverd,Tanja Petersen,Moritz Wolf,Neil Thomson

12:15 GIC modelling in Austria: comparison to long-term measurements in multiple stations

Rachel Bailey, Thomas Halbedl, Ingrid Schattauer, Alexander Römer, Georg Achleitner, Ciaran Beggan, Ramon Egli, Roman Leonhardt

12:30 Modelling and Mitigation of Geomagnetically Induced Currents in New Zealand: Working down to the Transformer-Level

Craig J. Rodger, Tim Divett, Michael Dalzell, Ciaran Beggan, Gemma Richardson, Daniel H. Mac Manus, Alan W P Thomson, and Mark A. Clilverd

12:45 An assessment of the spatial scales of second-minute scale dB/dt magnetic disturbances driving GICs: What spatial density of ground magnetometer stations is needed for GIC monitoring?

Stavros Dimitrakoudis, David K. Milling, Ian R. Mann, Andy Kale, Ivan Pakhotin

13:00-14:30 Lunch Break

Keynote

Room: Delvaux

14:30 The H2020 project SWAMI: Space Weather Atmosphere Model and Indices

Sean Bruinsma

15:00-16:15 Topical Discussion Meetings

Delvaux	Mercator	Permeke
Space Weather Activities in the Coordination Group for Meteorological Satellites	Assessment of ionospheric prediction capabilities: challenges in data-model comparisons	Solar Flares, Coronal Mass Ejections and Solar Energetic Particle events: Impacts on the Space Environment
Elsayed Talaat (NASA); Tsutomu Nagatsuma (NICT); Terry Onsager (NOAA)	*Ioanna Tsagouri (National Observatory of Athens); Ja Soon Shim (CUA/NASA GSFC); Ludger Scherliess (Utah State University); Endawoke Yizengaw (Boston College); Matthew Angling (University of Birmingham)*	*Olga E. Malandraki (SWWT-TWG1 Spokesperson, National Observatory of Athens/IAASARS, Greece); Nicole Vilmer (SWWT-TWG1 Spokesperson, LESIA, Observatoire de Paris); Norma B. Crosby (Royal Belgian Institute for Space Aeronomy)*

16:15-16:45 Coffee

End of meeting

Thank you for participating.
We hope to see you again next year!

POSTERS

Monday 27 - Wednesday 29

Session 1: Planetary Space Weather Services

1.e01 Planetary and cometary space weather predictions from observations near and far
Andrea Opitz, Karoly Szego, Zoltan Nemeth, Melinda Dosa, Zsuzsanna Dalya, Aniko Timar, Daniel Vech, Nicolas Andre

1.e02 Automatic Lunar Flash Investigation (ALFI) Software
Anthony Cook, Manuel Grande

1.p03 Testing space weather connections in the solar system
B. Grison, J. Soucek, V. Krupar, D. Písa, O. Santolík, U. Taubenschuss and F. Nemec

1.p04 Representation of planetary environments by universal paraboloid magnetospheric magnetic field model
Vladimir Kalegaev, Igor Alexeev, Elena Belenkaya, Sergey Bobrovnikov

1.p05 Study on a statistical model of the relativistic electron flux forecastat geostationary orbit
Zhong Qiu-Zhen, Zhen Jing-Lei, Liu Si-qing, Lin Rui-lin, Gong Jian-cun

1.p06 Revealing the pivot energy of SEPs contributing to the Martian surface radiation environment
Jingnan Guo, Robert F. Wimmer-Schweingruber, Manuel Grande, Tom Knight, Zoe Hannah Lee-Payne

Session 2: Best Practice In Transitioning Existing Space Science Tools To Operational SW Prediction Systems

2.e01 Validation-Based Decision Making
Manolis K. Georgoulis

2.e02 Robust NARMAX model and forecast of geomagnetic indices
Vitaliy Yatsenko

2.e03 The Ionosphere Prediction Service Project

Claudio Cesaroni, Filippo Rodriguez, Giorgiana De Franceschi, Marcio Aquino, Francesco Berrili, Michael Hutchinson, Ganesh Lalgudi Gopalakrishnan, Sreeja. Vaddake Veettil, Luca Spogli, Vincenzo Romano, Roberto Ronchini, Stefano Di Rollo and Dario Del Moro.

2.e04 EUHFORIA: a solar wind and CME evolution model

I S. Poedts, J. Pomoell, C. Verbeke, C. Scolini, N. Wijsen, E. Kipua, E. Lumme, E. Palmerio, A. Isavnin

2.e05 Finalizing the FLARECAST Project

Manolis K. Georgoulis, D. Shaun Bloomfield and the FLARECAST Consortium

2.p06 Combining photospheric and coronal observations to produce flare activity predictors

Ioannis Kontogiannis, Costis Gontikakis, Jordan, A. Guerra, Sung-Hong Park, Manolis Georgoulis

2.p07 Polarity-inversion-line properties in eruptive solar active regions and corresponding CME characteristics

Ioannis Kontogiannis, Manolis Georgoulis

2.p08 Numerical Modelling of Stealth Solar Eruptions

Dana-Camelia Talpeanu, Francesco Zuccarello, Emmanuel Chané, Stefaan Poedts, Elke D'Huys, Skralan Hosteaux, Marilena Mierla

2.p09 Magnetic observatory data products for space weather operations

Ellen Clarke, Gemma Richardson, Alan Thomson, Orsi Baillie, Sarah Reay, Thomas Humphries, John Williamson and Laurence Billingham

2.p10 Starting operative Space Weather activities in Argentina

V. Lanabere, S. Dasso, A. M. Gulisano and V. E. Lopez

2.p11 TBC: Approaches taken by P2-SWE-II project to design services for operational forecasters

Reuben Wright, others TBC from DH Consultancy, Met Office, Insitute of Space Science

2.p12 From kinetic models to predictive tools : solar wind and plasmasphere models

Viviane Pierrard

2.p13 Defining geomagnetic disturbance scale thresholds through statistics

J. Palacios, A. Guerrero, C. Cid, E. Saiz, and Y. Cerrato

2.p14 SWERTO: an operational regional Space Weather service

Francesco Berrilli, Marco Casolino, Dario Del Moro, Roberta Forte, Luca Giovannelli, Matteo Martucci, Matteo Mergè, Livio Narici, Giuseppe Pucacco, Alessandro Rizzo, Stefano Scardigli, Roberta Sparvoli

2.p15 Forecasting solar wind parameters at L1: Development of AWSOM/SWIFT

T. Arber, K. Bennett, M. Liemohn, B. van der Holst, S. N. Walker, M. A. Balikhin

2.p16 EUHFORIA background solar wind modeling – validation within the CCSOM project

Jürgen Hinterreiter, Manuela Temmer, Christine Verbeke, Nicolas Wijsen, Stefaan Poedts, Jasmina Magdalenic

2.p17 Validation of IPS-ENLIL for operational space weather forecasting purposes

Siegfried Gonzi, David Jackson, Emily Down, Edmund Henley, Marion Weinzierl, Anthony Yeates, Francois-Xavier Boquet, Mario Bisi

Session 3: Ground-based Instruments for Advanced Space Weather Projects

3.e01 LOFAR4SpaceWeather: Towards Space Weather Monitoring with Europe's Largest Radio Telescope

Richard Fallows, Rene Vermeulen, and Gert Kruithof, on behalf of the LOFAR4SW consortium

3.p02 Difference of Multiplicities in neutron monitor

Yury Balabin, Boris Gvozdevsky, Aleksey Germanenko

3.p03 Service Platform SAFE(Safety during Aviation Flight Environment from radiation) System

SeungBum Yang, TaeYoung Kim, JangSeok Choi, DoHyun Kim, SoYeon Kang, MyungJin Choi

3.p04 Ground based cosmic radiation monitoring with passive monitoring stations based on thermoluminescent detectors

Olivier Van Hoey, Filip Vanhavere

3.p05 Atmospheric temperature profiles at the Antarctic node of LAGO: Quiet and perturbed conditions

V.E. López, A.M. Gulisano and S. Dasso, for the LAGO Collaboration

3.p06 Cosmic rays using water Cherenkov detectors in Antarctic: First Campaign toward the Antarctic node of the LAGO Collaboration

Sergio Dasso, Adriana María Gulisano, Omar Areso, Maximiliano Ramelli, Matías Pereira, Ubaldo Ereñú, Viviana López, Héctor Ochoa, for the LAGO collaboration

3.p07 Atmospheric temperature profiles at the Antarctic node of LAGO: Quiet and perturbed conditions

V. E. López, A. M. Gulisano and S. Dasso for the LAGO Collaboration

3.p08 A set of secondary cosmic rays monitoring

Yury Balabin, Boris Gvozdevsky, Aleksey Germanenko

3.p09 Barentsburg, Apatity, Baksan are neutron monitors with advanced equipment

Yury Balabin, Dakhir Dzhappuev, Boris Gvozdevsky, Aleksey Germanenko

3.p10 Atmospheric temperature profiles at the Antarctic node of LAGO: Quiet and perturbed conditions

V. E. López, A. M. Gulisano and S. Dasso for the LAGO Collaboration

Session 4: The role of Interplanetary Coronal Mass Ejections in Space Weather

4.e01 Magnetic clouds and their driven shocks/sheaths near Earth: geoeffective properties studied with a superposed epoch technique

Sergio Dasso, Jimmy Joel Masías-Meza, Pascal Demoulín, Luciano Rodríguez, and Miho Janvier

4.e02 Quantification of solar wind parameters from measurments by SOHO and DSCOVR spacecrafts during series of Interplanetary Coronal Mass Ejections in the helioactive period September 2-15, 2017

Yordan Tassev, Peter I.Y. Velinov, Dimitrinka Tomova, Alexander Mishev

4.e03 Multipoint, galactic cosmic ray observations associated with a series of interplanetary coronal mass ejections: the case study of June 2015

A. Papaioannou, B. Heber, A. Anastasidis, A. Belov, K. Herbst, E. Eroshenko, A. Abunin, M. Abunina

4.e04 Galactic cosmic rays and Forbush decreases at Mars: comparison of measurement by MAVEN in orbit and by MSL on ground

Jingnan Guo, Niklas Lundt, Rob Lillis, Robert F. Wimmer-Schweingruber, Donald M. Hassler, Christina Lee, Henning Lohf, Arik Posner, Cary Zeitlin

4.p05 Sun-to-Earth simulations of geo-effective coronal mass ejections with EUHFORIA: A heliospheric-magnetospheric model chain approach

Camilla Scolini, Christine Verbeke, Stefaan Poedts, Luciano Rodriguez, Jens Pomoell, William D. Cramer, Joachim Raeder, Nat Gopalswamy

4.p06 Modelling coronal mass ejections with EUHFORIA: Testing the effect of different shapes on predictions at 1 AU

Camilla Scolini, Christine Verbeke, Stefaan Poedts, Jens Pomoell

4.p07 Determination of diffusion coefficients of cosmic rays in the inner heliosphere

Jimmy Masías-Meza,Sergio Dasso

4.p08 LISA-like missions for possible space weather applications
Simone Benella

4.p09 Accurate estimation of the near-Sun magnetic field of coronal mass ejections
Kostas Moraitis, Etienne Pariat, Antonia Savcheva

4.p10 First-principles simulations of magnetic reconnection within the solar environment
E. Boella, D. Gonzalez-Herrero, M. E. Innocenti and G. Lapenta

4.p11 Comparison between EUHFORIA and ENLIL: CME on September 4, 2010
Marilena Mierla, Camilla Scolini, Leila Mays, Jens Pomoell, Luciano Rodriguez

4.p12 Analysis of the magnetic field fluctuations during a substorm
Liudmyla Kozak, Bogdan Petrenko, Elena Kronberg, Elena Grigorenko, Antony Lui, Andrew Prokhorenkov

4.p13 Validation of Drag-Based Ensemble Model (DBEM): probabilistic model for heliospheric propagation of CMEs
Jaša Čalogović, Mateja Dumbović, Bojan Vršnak, Manuela Temmer, Leila M. Mays, Astrid Veronig

Session 5: Aviation Meets Space Weather - Roadmap Towards Space Weather Services for Aviation

5.p01 The multi-usage of cosmic ray data to Space Weather services
H. Mavromichalaki, M. Gerontidou, P. Paschalis, E. Paouris, A. Tezari

5.p02 Overview of the role of the European Aviation Safety Agency (EASA)
Chris Tyson

5.p03 ESA Space Situational Awareness Space Weather Service Network: Services to Airlines
Erwin De Donder, Norma Crosby, Claudia Borries, Alexi Glover

Session 8: Space Systems Engineering: Space Climate Modelling and the Effects of Severe Space Weather Events

8.e01 Environment conditions during the surface-charging anomaly of the two geosynchronous satellites reported: TELSTAR 401 and Galaxy 15

Elena Saiz, Antonio Guerrero, Consuelo Cid, Judith Palacios, Yolanda Cerrato

8.e02 The Project “Universat” of the System of Small Satellites for Monitoring of the Space Threats

E.P. Popova, M.I. Panasyuk, V.M. Lipunov, M. Barthelemy, A.A. Belov, V.V. Bogomolov, A.S. Chepurnov, K.S. Gilchenko, G.K. Garipov, E.S. Gorbovskoii, O.S. Grafodatskii, B. Escudier, A.F.Iyudin, V.V. Kalegaev, M.A. Kaznacheeva, P.A. Klimov, V.G. Kornilov, A.S. Kubankin, N.V. Kuznetsov, S.A. Lemeshevskii, S.A. Mit’, V.I. Osedlo, V.L. Petrov, M.V.Podsolko, A.Yu. Poroikov, M. Protassov, A.N. Shustova, I.A. Rubinshtein, K.Yu. Saleev, S.I. Svertilov, M. Stepanov, Ya.A. Shtunder, Yu.D. Troitskaya, V.I. Tulupov, I.V. Yashin

8.e03 Solar Particle Events of September 2017: Multi-Spacecraft Observations and Space System Effects

Piers Jiggens, Hugh Evans, Eamonn Daly, T.A. Lisker, S. Benck, Thomas Berger

8.p04 New integrated pre-processing chain for radiations and internal charging analysis to model time variations impacts on space systems

Benjamin Jeanty-Ruard, Arnaud Trouche, Pierre Sarrailh, Giovanni Santin, Didier Falguère, Amandine Champlain, Julien Forest

8.p05 Statistical modelling of solar flare extremes

Thomai Tsiftsi

8.p06 Extreme value theory for the study of electron fluxes in the radiation belts: Observations from ICARE-NG/CARMEN-1, SAC-D

Vanina Lanabere and Sergio Dasso

8.p07 Empirical model of galactic cosmic ray particle fluxes based on the experimental data in solar cycles 21–24

Elena Popova, Nikolay Kuznetsov, Mikhail Panasyuk, Mikhail Podzolko

8.p08 Space Environment Automated Alerts & Anomaly Analysis Assistant (SEA5)

Justin Boblitt, Tyler Schiewe, Yihua Zheng, Maria Kuznetsova, M. Leila Mays, Stijn Calders, Erwin De Donder

8.p09 Statistical study of DMSP surface-charging events over one solar cycle

Xuejie Meng, Dong Chen, Liqin Shi, Siqing Liu, Shanqiang Chen

8.p10 Differences and similarities in relativistic electron fluxes dynamics during two large geomagnetic storms in 2015

Vladimir Kalegaev, Natalia Vlasova, Evgenia Beresneva, Ilya Nazarkov, Arnaud Prost, Daniel Boscher, Angelica Sicard-Piet, Vincent Maget

8.p11 Variation of high-energy electron's flux at geostationary orbit and its correlation with space weather characteristics

Vasily S. Anashin, Grigory A. Protopopov, Igor A. Lyakhov, Valentina I. Denisova, Alexey V. Tsurgaev

8.p12 Long-term modeling of the ring current and radiation belt electron dynamics with the VERB-4D code

Nikita Aseev, Yuri Shprits, Alexander Drozdov, Adam Kellerman, Dedong Wang

8.p13 Extreme Events and Extreme Energies

Yuri Shprits

8.p14 Radiation hazards and mitigation for M5 ESCAPE

Johan De Keyser, Iannis Dandouras, Masatoshi Yamauchi, Henri Rème, Octav Marghitu, Ioannis Daglis, Antonis Paschalis and the M5 ESCAPE proposal team

8.p15 PROBA-V/EPT data products for improved LEO radiation belt understanding

Stanislav Borisov, Sylvie Benck and Mathias Cyamukungu

Session 9: The role of solar radio observations in Space Weather science

9.e01 Constraining the solar coronal magnetic field strength using split-band type II radio burst observations

P. Kishore, R. Ramesh, K. Hariharan, C. Kathiravan, and N. Gopalswamy

9.e02 The Dawn of Solar Physics and Space Weather studies with the Sardinia Radio Telescope: Imaging of the Chromosphere in the Millimeter Range, a Feasibility Study

Alberto Pellizzoni, Noemi Iacolina, Alessandro Navarrini, Giuseppe Valente, Elise Egron, Mauro Messerotti

9.p03 Radio observations as input for the ESPERTA model to forecast moderate-to-extreme solar proton events

Monica Laurenza, Tommaso Alberti, and Edward W. Cliver

9.p04 Impact of the 2015 November 04 solar radio burst on Air Traffic operations

C. Marqué, K. -L. Klein, C. Monstein, H. Opgenoorth, S. Buchert, A. Pulkkinen, S. Krucker, R. Van Hoof, P. Thulesen

9.p05 Active region jets on August 25, 2011

L. Harra, S. Matthews, D. Berghmans, V. Krupar, D. Mueller

9.p06 Multi-instrument observations of an X9.3 flare

I. E. Dammasch, M. Dominique, J. Magdalenic, C. Marqué

9.p07 Real-Time Alert System for GNSS Signal Degradation Caused by Solar Radio Bursts.

Jean-Marie Chevalier, Nicolas Bergeot

9.p08 Radio observations of recent solar flares from ESA Soil Moisture and Ocean Salinity (SMOS) Mission

Raffaele Crapolicchio, Daniele Casella, Christophe Marqué

Thursday 30 - Friday 1

Session 10: ICME and SEPs throughout the Heliosphere: multi-spacecraft observations and data-driven modeling

10.p01 Solar energetic electron events during solar cycles 23 and 24

Susan Samwel, Rositsa Miteva, Marcus Costa-Duarte

10.p02 Multi-spacecraft observations and transport simulations of solar energetic particles for the May 17th 2012 ground level event

Markus Battarbee, Jingnan Guo, Silvia Dalla, Robert Wimmer-Schweingruber, Bill Swalwell, David J. Lawrence

10.p03 Cosmic ray modulation by ICME-driven shocks

Anamarija Kirin, Bojan Vršnak, Mateja Dumbović, Bernd Heber, Slaven Lulić

10.p04 Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr von Forstner,Jingnan Guo,Robert F. Wimmer-Schweingruber,Donald M. Hassler,Manuela Temmer,Mateja Dumbović,Lan K. Jian,Jan K. Appel,Jaša Čalogović,Bent Ehresmann,Bernd Heber,Henning Lohf,Arik Posner,Christian T. Steigies,Bojan Vršnak,Cary J. Zeitlin

10.p05 The analytical diffusion-expansion model for Forbush decreases caused by flux ropes

Mateja Dumbovic, Manuela Temmer

10.p06 Unusual cosmic ray intensity variations during the last solar cycles

Athanasios Smponias, Ioannis Lytrosyngounis, Evangelia Samara, Dimitra Lingri, Helen Mavromichalaki

10.p07 Precursor signals on Forbush decreases of cosmic ray intensity without shock

Dimitra Lingri, Helen Mavromichalaki, Anatoly Belov, Eugenia Eroshenko, Maria Abunina

10.p08 Tracking the evolution of solar storms in interplanetary space through the identification of Forbush decreases at Earth and at Mars

A. Papaioannou, A. Anastasiadis, J. Guo, A. Belov, E. Eroshenko, A. Abunin, M. Abunina

10.p09 Modeling observations of solar coronal mass ejections with heliospheric imagers verified with the Heliophysics System Observatory

C. Möstl, A. Isavnin, P. D. Boakes, E. K. J. Kilpua, J. A. Davies, R. A. Harrison, D. Barnes, V. Krupar, J. P. Eastwood, S. W. Good, R. J. Forsyth, V. Bothmer, M. A. Reiss, T. Amerstorfer, R. M. Winslow, B. J. Anderson, L. C. Philpott, L. Rodriguez, A. P. Rouillard, P. Gallagher, T. Nieves-Chinchilla and T. L. Zhang

10.p10 Modelling Solar Energetic Particle Propagation in 3D Heliospheric Solar Wind Conditions

Nicolas Wijsen, Angels Aran, Stefaan Poedts, Jens Pomoell

Session 11: Space Weather effects in the ionosphere and thermosphere: advances in monitoring, modeling and mitigation techniques

11.e01 Variation of foF2 in Rome observatory during solar minimum in the last three solar cycles

A. Ippolito L. Perrone and C. Cesaroni

11.e02 Variation of Total Electron Contents (TECs) during the last solar minimum in Rome

Alessandro Ippolito, Claudio Cesaroni, Luca Spogli

11.e03 Real-time identification of travelling ionospheric disturbances based on high frequency reflected radio pulses

Anna Belehaki, Bodo Reinisch, Ivan Galkin, David Altadill, Tobias Verhulst, Jens Mielich, Dalia Buresova, Daniel Kouba and the Net-TIDE project team

11.e04 SID monitor from Paris Observatory

Carine Briand, Sofiane Mezziani

11.e05 The detection of ultra-relativistic electrons in low Earth orbit

Athanassios Katsiyannis, Marie Dominique, Viviane Pierrard, Graciela Lopez Rosson

11.e06 The Limadou project on the CSES space mission: Study of seismo associated phenomena.

A. De Santis, C. Cesaroni, G. Cianchini, R. Di Giovambattista, A. Ippolito, D. Marchetti, L. Perrone and A. Piscini

11.e07 A new 3D electron density nowcast and forecast service for the Ionosphere Monitoring and Prediction Center based on gradient enhanced kriging and SMART+

David Minkwitz and Tatjana Gerzen

11.e08 Hemispheric asymmetry of ionospheric scintillations during the 2015 St. Patrick's Day storm

Giulia D'Angelo, Mirko Piersanti, Igino Coco, Lucilla Alfonsi, Luca Spogli

11.e09 Plasma Impedance of Ne using an Ejectable System experiment (PIONeERS)

Jonathan Camillieri, Hannah Swinbourne, Chloe Weyham, Matthew J. Angling

11.p10 The UAH-SID monitoring station

Fernando Montoya, Alberto Garcia, Antonio Guerrero, Judith Palacios, and Consuelo Cid

11.p11 Retrieval of O and N2 distributions from PROBA2-LYRA occultation data

Marie Dominique, Edward Thiemann

11.p12 Using platform magnetometers to observe and detect Space Weather events

Eelco Doornbos, Claudia Stolle, Martin Rother, Ingo Michaelis, Gang Lu, Lotfi Massarweh, Alessandra Menicucci, Elisabetta Iorfida

11.p13 Space weather monitoring project at the Normal Lockyer Observatory, UK

William Borrows, Lucia Calverley, Daniel Gymer, Amy Hampshire, Thomas Ledgerwood, Stephanie O'Neil, Rowan Walker-Gibbons, Sharon Strawbridge, Iain Grant, Alan Shuttleworth, Ken Bailey, Suzy Bingham, Steve Marple, Ez Balci

11.p14 Effects of Thermosphere Total Density Perturbations during Severe Conditions, as revealed by the GRACE mission

Florent Deleflie, Carine Briand, Muhammad Ali Sammuneh, Richard Biancale

11.p15 Climatological behaviour of the Total Electron Content at the South Pole

Nicolas Bergeot, Jean-Marie Chevalier

11.p16 September 2017 ionospheric storm effects observed in the Pruhonice station

Zbysek Mosna, Daniel Kouba, Petra Koucka Knizova, Dalia Buresova, Tereza Sindelarova, Jaroslav Urbar, Jaroslav Chum

11.p17 Digisonde drift measurement during the September 2017 storm

Daniel Kouba, Zbysek Mosna, Petra Koucka Knizova, Dalia Buresova, Tereza Sindelarova, Jaroslav Urbar, Jaroslav Chum

11.p18 New Space Weather Instrumentation in Support of EISCAT_3D

Thomas Ulich, Antti Kero, Johannes Norberg, Mikko Orispää, Tomi Teppo, Juha Vierinen, Lassi Roininen, Tero Raita, Markku Lehtinen, Esa Turunen

11.p19 Data analysis and simulation of Plasma Flow Vortices in the Magnetotail

Kh. Chargazia, O. Kharshiladze, G. Zimbardo, J, Rogava

11.p20 Complex Dynamics of Equatorial Scintillation

M. Piersanti, L. Spogli, A. Cicone, L. Alfonsi, M. Materassi, V. Romano and R.G. Ezquer

11.p21 Evaluating the dependence of the foF2 parameter variation on geomagnetic activity during the maximum of the #24 solar cycle at midlatitude

K. A. Berényi, Á. Kis, V. Barta

11.p22 First estimation of the suprathermal electron momentum in the upper ionosphere

Hanane Marif, Jean Lilensten

11.p23 Multi-station basis for Polar Cap (PC) indices. Ensuring credibility and operational reliability.

Peter Stauning

11.p24 First Measurements from the EUV and X-Ray Irradiance Sensors (EXIS) on GOES-16

J. Machol, F. Eparvier, R. Viereck, T. Woods, A. Jones, M. Snow, D. Woodraska, E. Thiemann, W. McClintock, M. Anfinson

11.p25 Statistical Investigation of Ionospheric Electron Density During Geomagnetic Storms Over Istanbul And Implications for GPS Communications

Bute Naz Erbaş, Zerefşan Kaymaz

11.p26 Vertical and oblique incidence sounder networks in the Australian region

Phillip Maher, Vickal Kumar, Zahra Bouya

11.p27 Geomagnetic storm effect at mid-low-equatorial D-region ionosphere inferred using very low frequency waves

Ajeet Kumar Maurya

11.p28 Seasonal and local time evolution of geomagnetic fluctuations over the last 100 years

Pyry Peitso, Eija Tanskanen

11.p29 Ionospheric and thermospheric response to the 22-23 June 2015 geomagnetic storm as seen from the Swarm constellation

E. Astafyeva, I. Zakharenkova, E. Doornbos, J. van den IJssel

11.p30 The solar wind driving as a regulator of ionospheric concentration dynamic in the auroral zone

Liudmila Makarova, Alexander Shirochkov

11.p31 The Met Office Atmospheric Density Service

Mike Marsh, David Jackson, Daniel Heynderickx, Eugeniu Mihnea Popescu, Ana Caramete, Vlad Constantinescu, Reuben Wright

Session 12: Enhanced Space Weather Monitoring System (LAGRANGE MISSIONS & D3S)

12.p01 Development of a miniaturised energetic particle detector for Space Weather applications

Yulia Bogdanova, Nicola Guerrini, Simon Woodland, Henrique Araujo, Rain Irshad, Doug Griffin, Eamonn Daly

12.p02 The Worldwide Interplanetary Scintillation (IPS) Stations (WIPSS) Network as a Future Worldwide Space-Weather Instrument

Mario M. Bisi, J. Americo Gonzalez-Esparza, Bernard V. Jackson, Hsiu-Shan Yu, Munetoshi Tokumaru, Igor Chashei, Sergey Tyul'bashev, Richard A. Fallows, Periasamy K. Manoharan, Ernesto Aguilar-Rodriguez, Oyuki Chang, Dusan Odstrcil, David F. Webb, Vladimir Shishov, and David Barnes.

12.p03 Space weather data from high resolution space radiation monitoring with the miniaturized spacecraft payload SATRAM/Timepix on board Proba-V satellite

Carlos Granja

12.p04 Energetic Neutrals for Space Environment Monitoring

Yoshifumi Futaana, Xiao-Dong Wang, Martin Wieser, Georgios Nicolaou, Stas Barabash, Berndt Klecker, Peter Wurz, Phillipe Escoubet, Alain Hilgers, Fabrice Cipriani

12.p05 Solar Observations from Off the Sun-Earth Line: Sun-Earth Lagrangian Explorer (SELEX)

Nat Gopalswamy, Barbara J. Thompson, Terry Kucera, Joseph M. Davila, O. Christopher St. Cyr, Charles N. Arge, Douglas Rabin, Qian Gong; Sarbani Basu; Leon Golub, Ed DeLuca; Craig DeForest; Valentin Martinez-Pillet, Frank Hill, Mark Miesch; Jesper Schou, Sami K. Solanki; Jackie Davies, Richard A. Harrison; David Berghmans; S. Paul Rajaguru

12.p06 Occurrence of anomalies on operating ESA satellites

C. Clavie, S. Kraft, J.P. Luntama

Session 13: System Science: Application to space weather analysis, modelling and forecasting

13.e01 Long Term Variation of Latitudinal Distribution of Coronal Holes

Bidzina Chargeishvili, Darejan Japaridze, Tengiz Mdzinarishvili, Bidzina Shergelashvili

13.p02 Three-dimensional data assimilation and reanalysis of radiation belt electrons

Juan Sebastian Cervantes-Villa, Yuri Shprits, Adam Kellerman, Alexander Drozdov

13.p03 Proton Prediction using Deep learning

SeungBum Yang, TaeYoung Kim, JangSeok Choi, DoHyun Kim, SoYeon Kang, MyungJin Choi

13.p04 Solar Demon flare and dimming statistics from AIA observations 2010-2017

Emil Kraaikamp, Cis Verbeeck

13.p05 Forecasting the AE indices using machine learning

Magnus Wik, Peter Wintoft

13.p06 A Comparative Performance Study of Machine Learning Algorithms for Space Weather Forecasting

Nikolaos Nanouris, Panos Boumis

13.p07 Using the Local Ensemble Transform Kalman Filter (LETKF) For Upper Atmosphere Modelling

Sean Elvidge, Matthew J. Angling

13.p08 Space radiation study based on cascades simulations in geospace

Pavlos Paschalis, Helen Mavromichalaki, Anastasia Tezari, Maria Gerontidou

13.p09 Operational control of near-Earth's radiation conditions by space weather services at SMDC MSU

S. Bobrovnikov, V.Kalegaev, V.Barinova, N.Kuznetsov, I. Myagkova, D. Nguyen, Yu. Shugay, N. Vlasova

13.p10 A self-consistent method for deriving polar ionospheric convection from eigenanalysis of SuperDARN radar data

Robert Shore, Mervyn Freeman, Gareth Chisham

13.p11 Training a new generation of Space Weather experts in Machine Learning

Jorge Amaya, Diego Gonzalez-Herrero, Giovanni Lapenta

13.p12 Robust Nonlinear Predictive Model Identification for Kp index Forecasting

Yuanlin Gu, Hua-Liang Wei, Simon N. Walker and Michael A. Balikhin

13.p13 Hidden factors in Solar-Terrestrial Connection as reason of natural limitation on forecasting efficiency of space weather impacts

Pustil'nik Lev A.

13.p14 Development of MLT electron flux models

M. A. Balikhin, S. N. Walker

13.p15 Increasing the horizon of the Sheffield GEO radiation belt electron flux forecasts.

S. N. Walker, T. Arber, K. Bennett, M. Liemohn, B. van der Holst, P. Wintoft, N. Y. Ganushkina, and M. A. Balikhin

13.p16 Forecasting the photospheric magnetic field using machine learning

Ljubomir Nikolic, Julio J. Valdes

Session 14: Multi-viewpoint versus single-viewpoint observations and modelling - Lessons learned from 10 years of STEREO

14.e01 Deriving Kinematic Properties of Non-Radial and Asymmetric CMEs: Methods and Implications

Barbara Thompson

14.e02 Solar wind speed forecasting with a STEREO persistence model using uncertainty assessment from the evolution of coronal holes

Manuela Temmer, Juergen Hinterreiter, Martin A. Reiss

14.e03 STEREO/SDO Observations of Stealthy but Earth-affecting CMEs

Nariaki Nitta, Tamitha Mulligan

14.e04 Continuous 360 degree observation of a large, long-living, low-latitude coronal hole during the maximum of solar cycle 24

Stephan G. Heinemann, Manuela Temmer, Stefan Hofmeister, Astrid M. Veronig, Susanne Vennerstrom

14.e05 Can coronal dimmings serve as proxy for characteristic CME parameters?

Karin Dissauer, Astrid M. Veronig, Manuela Temmer, Kamalam Vanninathan, Tatiana Podladchikova, Julia M. Riedl

14.e06 Solar signatures and eruption mechanism of the August 14, 2010 coronal mass ejection

Elke D'Huys, Daniel B. Seaton, Anik De Groof, David Berghmans, Stefaan Poedts

14.p07 Simulation of CMEs in 2007 – 2016 Using the WSA-ENLIL+Cone Modeling System

L.K. Jian, D. Odstrcil, M.L. Mays, A.P. Rouillard

14.p08 A consideration of the multi-viewpoint and single-viewpoint exploitation of heliospheric imaging in light of the ten years of the STEREO/HI instruments

Richard Harrison, Jackie Davies

14.p09 Automated detection of coronal mass ejections in three-dimensions using multi-viewpoint observations

Joseph Hutton, Huw Morgan

14.p10 A multi-spacecraft view of a giant filament eruption during 2009 september 26/27

Brigitte Schmieder, Sanjay Gosain, Guy Artzner, Sergei Bogachev, Tibor Török

14.p11 Active region evolution and the formation of eruptive configurations

Lucie Green, Alex James, Gherardo Valori, Stephanie Yardley

14.p12 A regularised full-Newton VARPRO iteration for the stereoscopic reconstruction of loops in EUV images

Bernd Inhester, Iulia Chifu

Session 15: Ground-based Operational and Infrastructure Impacts of Space Weather

15.e01 Strengths and weaknesses of monitoring useful realtime mid-latitude geomagnetic disturbances: Local Disturbance index and Local Current index

Antonio Guerrero, Elena Saiz, Consuelo Cid, Judith Palacios, Yolanda Cerrato

15.p02 Association between space weather conditions and emergency ambulance calls for elevated arterial blood pressure

Jone Vencloviene, Deivydas Kiznys, Agne Braziene, Paulius Dobozinskas

15.p03 Characterizing the geomagnetic field variability for the study of magnetic storm impact on electric power lines

Pilipenko V.A., Belakhovsky V.B., Sakharov Ya.A., Selivanov V.N.

15.p04 SWIGS: A New UK Research Consortium to Study 'Space Weather Impacts on Ground-based Systems'

Alan Thomson (on behalf of the SWIGS consortium)*

15.p05 An investigation into Geoelectric tides at three sites in the UK

Orsi Baillie, Kathy Whaler, Ciaran Beggan

15.p06 Space weather effects and Polish energy infrastructure

A. Gil, R. Modzelewska, P. Szmitkowski, A. Wawrzynczak