### **SAIP2016**

# Tuesday 05 July 2016

Space Science: Plasma Physics - 5B (10:00-10:40)

#### -Conveners: John Bosco Habarulema

time [id] title	presenter
10:00 [97] Nonlinear dust-acoustic waves in the nighttime polar mesosphere	Dr MAHARAJ, Shimul
10:20 [244] A small-amplitude study of solitons near supercritical points	Dr OLIVIER, Carel

#### Space Science: Plasmas and low latitude ionosphere - 5B (11:10-12:10)

#### -Conveners: Shimul Kumar Maharaj; John Bosco Habarulema

time	[id] title	presenter
11:10	[249] Characterization of a Direct Current Discharge Based Microthruster	Mr WRIGHT, William
11:30	[196] Confirmation of low latitude electrodynamics in driving poleward waves	Dr HABARULEMA, John Bosco
11:50	[98] Plasma Drift Modeling: Multivariate Analysis	Mr DUBAZANE, Makhosonke

#### Space Science: Low- and mid-latitude ionosphere - 5B (14:00-15:40)

#### -Conveners: Maharaj Shimul

time	[id] title	presenter
14:00	[99] Quiet time enhancements over African latitudes	Ms ORFORD, Nicola
14:20	[520] Using Particle Image Velocimetry (PIV) to determine velocities of TIDs over South Africa	Mr MAHLANGU, Fiso
14:40	[526] A comparison of measured TEC data with the IRI2011 and NeQuick 2 model results over the transition regions from low to mid-latitudes	Dr SIBANDA, Patrick
15:00	[530] Division Meeting: Astrophysics and Space Science	Dr ENGELBRECHT, Christian Dr HABARULEMA, John Bosco

SAIP2016 / Programme Wednesday 06 July 2016

# Wednesday 06 July 2016

#### Space Science: High latitude studies - 5B (09:40-10:40)

-Conveners: Michael Kosch

time [id] title	presenter
09:40 [192] Investigation of the number of time ground-backscatter occurs for all t beams and range gates using the SuperDARN SANAE HF radar data.	he Dr MTUMELA, Zolile
10:00 [123] Ionospheric Disturbances During Geomagnetic Storm at SANAE	Mr HIYADUTUJE, Alicreance
10:20 [122] The mystery of black auroras	Ms NEL, Amore

#### Space Science: Heliospheric Physics - 5B (11:10-12:10)

#### -Conveners: Patrick Sibanda; Du Toit Strauss

time [id] title		presenter
11:10	[399] Long-term cosmic-ray modulation model: A simplified ab initio approach	Mr MOLOTO, KATLEGO
11:30	[86] Solar energetic particles and their transport to Earth	Dr STRAUSS, Du Toit
11:50	[361] Analyses of heliospheric magnetic field data as input for ab initio modulation models	Prof. BURGER, Renier

### Space Science: Heliospheric Physics and thermospheric studies - 5B (14:00-15:40)

#### -Conveners: Olakunle Ogunjobi; Pierre Cilliers

time	[id] title	presenter
14:00	[94] Cosmic ray ground level enhancments: Power of pulse shape	Dr OGUNJOBI, Olakunle
14:20	[75] The total solar modulation of low energy electrons in the heliosphere	Dr NNDANGANENI, Rendani
14:40	[64] TEC modelling over the African sector during geomagnetic storms	Mr UWAMAHORO, Jean Claude
	[65] Analysis of ionospheric response to great geomagnetic storms during solar cycle 23	Mrs MATAMBA, Tshimangadzo Merline
15:20	[183] Thermospheric neutral density observations by radar	Prof. KOSCH, Michael

SAIP2016 / Programme Thursday 07 July 2016

# Thursday 07 July 2016

### Space Science: Space Geodesy - 5B (09:40-10:40)

### -Conveners: Rendani nndanganeni

time	[id] title	presenter
09:40	[287] Near-Earth Object Avoidance Mitigation: Profiting One Rock at a Time	Dr MACLEOD, Gordon
	[125] Development of an integrated model and system to enable optimal efficiency of the HartRAO LLR system	Dr BOTHA, Roelf
	[517] Tube assembly experiments for optimal temperature sensor placement on the HartRAO Lunar Laser Ranger telescope	Mr TSELA, Philemon

#### **Space Science: Open session and recent results (11:10-12:10)**

#### -Conveners: John Bosco Habarulema; Zolile Mtumela

time	[id] title	presenter
	[81] Beam-driven slow and fast electron-acoustic solitons in three-electron temperature space plasmas	Mr MBULI, Lifa Nicholas
11:30	[21] AfriSprite campaign 2015/16	Mr NNADIH, Stanislaus
11:50	[18] Automated Scheduling for a robotic astronomical telescope	Mr MAARTENS, Deneys

SAIP2016 / Programme Friday 08 July 2016

# **Friday 08 July 2016**

Space Science: Plasma Physics - 5B (09:40-10:40)

-Conveners: John Bosco Habarulema

Space Science: Space Science - 5B (11:10-12:10)

-Conveners: John Bosco Habarulema

time [id] title	presenter
11:10 [357] SILVER MEDALLIST LECTURE: 3D Models of Stellar Wind Interactions	Dr MOHAMED, Shazrene
11:50 [11] Solar Total Irradiance Behaviour during Cycle 23-24	Dr KOTZE, Pieter