



# SAIP2016

## Tuesday 05 July 2016

### Astrophysics (1): Cosmology and Large-Scale Structure - 5A (10:00-10:40)

**-Conveners: Brian van Soelen**

time	[id] title	presenter
10:00	[2] A Multi-frequency analysis of dark matter annihilation interpretations of recent anti-particle and gamma-ray excesses in cosmic structures.	Mr BECK, Geoff
10:20	[60] Anti-Newtonian cosmological solutions in fourth-order gravity	Dr ABEBE, Amare

### Astrophysics (1): PhD Awards: General - 5A (11:10-12:10)

**-Conveners: Patrick Woudt**

time	[id] title	presenter
11:10	[491] Probing accretion in magnetic Cataclysmic Variables through fast photometry	Mr BREYTENBACH, Hannes
11:30	[269] Kozai-Lidov mechanism in LS I +61 303?	Mr MONAGENG, Itumeleng
11:50	[427] Studying the Star formation - Neutral gas relation in WHISP Galaxies	Ms NALUMINSA, Elizabeth

### Astrophysics (1): Cosmology, Large-Scale Structure and Galaxies - 5A (14:00-15:40)

**-Conveners: Michael Feast**

time	[id] title	presenter
14:00	[282] Simulations of systematic effects for 21-cm observations	Mrs NUNHOKEE, Chuneeta Devi
14:20	[304] Survey of Southern Local Group Dwarf Galaxies.	Ms NAMUMBA, BRENDA
14:40	[404] Galaxy Dynamics and Star Formation in the Inner Regions of SINGG Galaxies.	Mr MOGOTSI, Moses
15:00	[529] Division Meeting: Astrophysics and Space Science	Dr ENGELBRECHT, Christian Dr HABARULEMA, John Bosco

# Wednesday 06 July 2016

## Astrophysics (1): Computational Methods - 5A (09:40-10:40)

-Conveners: Shazrene Mohamed

time	[id] title	presenter
09:40	[326] Orthonormal vector polynomials in a general pupil	Dr MAFUSIRE, Cosmas
10:00	[71] Streams out of a Cloud	Dr DEG, Nathan
10:20	[82] Graph theory and pulsar astronomy tie the knot: the use of labeled graph kernels in exploring the pulsar P-Pdot diagram	Mrs ELIZABETH, Maritz

## Astrophysics (1): MSc / PhD Awards: General - 5A (11:10-12:10)

-Conveners: Pieter Meintjes

time	[id] title	presenter
11:10	[438] Probing the role of mergers in galaxy evolution with HI profile asymmetries	Ms BOK, Jamie
11:30	[19] Modelling Radiative Line Transfer in Maser Environments	Ms VAN ROOYEN, Ruby
11:50	[459] 3D Radiation-Hydro Models of the Circumstellar Environments of Evolved stars	Mr AYDI, Elias

## Astrophysics (1): Gravity and High Energy Astrophysics - 5A (14:00-15:40)

-Conveners: Patricia Whitelock

time	[id] title	presenter
14:00	[149] NON-SPECIALIST LECTURE: The gravitational wave event GW150914	Prof. BISHOP, Nigel
14:40	[202] Irrotational-fluid cosmologies in fourth-order gravity	Ms ELMARDI, Maye
15:00	[368] The Shear-Free Perfect Fluid Conjecture in General Relativity: Progress	Mr SIKHONDE, Muzikayise
15:20	[284] Constraining Lorentz Invariance violation using directional correlations of Gamma-Ray Bursts with IceCube cosmic neutrinos	Dr MOHARANA, REETANJALI

# Thursday 07 July 2016

## **Astrophysics (1): PhD Awards: General - 5A (09:40-10:40)**

**-Conveners: Amare Abebe**

time	[id] title	presenter
09:40	[105] Modeling the JVLA primary beam using characteristic basis function	Mr IHEANETU, Kelachukwu
10:00	[246] Direction Dependent Calibration for the KAT-7 radio data	Mr KASSAYE, Ermias
10:20	[50] Rethinking IIR filters as part of real-time pulsar astronomy	Mr JACQUES, Maritz

## **Astrophysics (1): Compact Binaries - 5A (11:10-12:10)**

**-Conveners: Vanessa McBride**

time	[id] title	presenter
11:10	[62] The long-term evolution of the helium nova V445 Puppis	Prof. WOUTDT, Patrick
11:30	[310] Characterising new Be/X-ray binaries in the Large Magellanic Cloud	Ms VAN JAARVELD, Johanna
11:50	[434] Magnetic Cataclysmic Variables in the Catalina Real-time Transient Survey	Ms MOTSOLEDI, Mokhine

# Friday 08 July 2016

## Astrophysics (1): HE Astrophysics and Quasars - 5A (09:40-10:40)

-Conveners: David Buckley

time	[id] title	presenter
09:40	[141] A comparative timing and spectral analysis of <i>Suzaku</i> X-ray data of the nova-like variable system AE Aquarii.	Dr VAN HEERDEN, Hendrik Jacobus
10:00	[392] The contribution of photons from the circumstellar disc to gamma-gamma absorption in PSR B1259-63	Dr VAN SOELEN, Brian
10:20	[453] Low mass supermassive blackholes of quasars and the low frequency radio luminosity correlation.	Mr MGUDA, Zolile

## Astrophysics (1): Pulsars; Galaxies - 5A (11:10-12:10)

-Conveners: Tana Joseph

time	[id] title	presenter
11:10	[255] Spatially-Dependent Modelling of Pulsar Wind Nebulae	Mr VAN RENSBURG, Carlo
11:30	[250] Discovery of the First White Dwarf Pulsar	Dr BUCKLEY, David
11:50	[36] Investigating the hot gas in active Brightest Cluster Galaxies	Dr RATSIMBAZAFY, ANDO

## Astrophysics (1): Galaxies and GRBs - 5A (14:00-15:40)

-Conveners: Bradley Frank

time	[id] title	presenter
14:00	[315] Galaxy stacking strategies for MeerKAT	Dr ELSON, Ed
14:20	[180] Identifying new narrow-line Seyfert 1 galaxies and white dwarfs from the second ROSAT all-sky survey catalogue	Dr ODENDAAL, Alida
14:40	[385] Observing Gamma-Ray Bursts with the H.E.S.S. experiment	Dr GARRIGOUX, Tania