

The Emerging, Multi-wavelength Picture of the Galactic Centre Environment

Monday 17/10/2011:

08:00 – 09:00: Registration

09:00 – 09:15: Welcome and organisational information

Morning Session 1: 9:15 – 10:00

09:15 – 10:00: Introductory talk by Karl Menten on *The interstellar medium of the inner 400 pc: an overview*

Morning Session 2: 10:00 – 13:00

Topic: *The ISM of the GC I*

10:00 – 10:30: Sergio Molinari - *A twisted ring of cold and dense dust revealed by Herschel around the Galactic centre*

Coffee: 10:30 – 11:00

11:00 – 11:30: Sungsoo S. Kim – *The nuclear star forming ring of the Milky Way*

11:30 – 12:00: Maryvonne Gerin – *Submillimeter absorption spectroscopy near SgrA*

12:00 – 12:30: Tomoharu Oka – *High-velocity compact clouds in the Central Molecular Zone of our Galaxy*

Lunch: 12:30 – 14:00

Afternoon Session 1: 14:00 – 16:00

Topic: *X-ray emission from the GC region I*

14:00 – 14:30: Andrea Goldwurm – *The INTEGRAL view of the the Galactic centre*

14:30 – 15:00: Regis Terrier – *Echoes in the Galactic centre: Variable 6.4 keV*

15:00 – 15:30: Renzo Capelli – *Fe K α line emission as a tracer of high energy activity in the Galactic centre region: a role for Sgr A*?*

15:30 – 16:00: Hiro Odaka – *X-ray reflections from the Galactic centre and prospects for ASTRO-H*

Coffee: 16:00 – 16:30

Afternoon Session 2: 16:30 – 18:30

Topic: *X-ray emission from the GC region II*

16:30 – 17:00: Robert Warwick – *Thermal and non-thermal X-ray emission in the Galactic centre*

17:00 – 17:30: Katsuji Koyama – *Fe-line distribution in our Galactic centre*
17:30 – 18:10: Mikhail Revnivtsev – *A review of the contribution of point sources to the total surface brightness of the Galaxy + Spun-up stars and the X-rays from Sgr A**

Tuesday 18/10/2011:

Morning Session 1: 09:00 – 10:30

Topic: *Magnetic fields of the GC and other galactic nuclei*

09:00 – 09:30: David Jones – *Magnetic Fields in the Galactic centre region*

09:30 – 10:00: Rainer Beck – *Magnetic fields in the central regions of spiral galaxies*

10:00 – 10:30: Volker Hessen – *Magnetic filaments in the nuclear outflow of NGC 253*

Coffee: 10:30 – 11:00

Morning Session 2: 11:00 – 13:00

Topic: *Dynamical importance of LE CRs and turbulence*

11:00 – 11:30: Farhad Yusef-Zadeh – *The Interaction of cosmic-ray particles with Galactic centre molecular clouds*

11:30 – 12:00: Takeshi Oka – *High ionization rate and a vast amount of warm and diffuse gas in the Central Molecular Zone*

12:00 – 12:30: Rahul Shetty – *Starburst regulation via feedback driven turbulence*

Topic: *Dark Matter*

12:30 – 13:00: Lars Bergstrom – *Dark Matter at the Galactic centre*

Lunch: 13:00 – 14:30

Afternoon Session 1: 14:30 – 16:30

Topic: *The SMBH of Sgr A* I*

14:30 – 15:00: Sera Markoff – *Sagittarius A*: quiescent but not atypical*

15:00 – 15:30: Katie Dodds-Eden – *Time dependent models for the near-infrared and X-ray flares from Sgr A**

15:30 – 16:00: Feng Yuan – *Accretion, episodic ejection, and continuous outflow from Sgr A**

Coffee: 16:00 – 16:30

Afternoon Session 2: 16:30 – 17:30

Topic: *The SMBH of Sgr A* II*

16:30 – 17:00: Roman Shcherbakov – *Sgr A*^{*}: energizing the surroundings across epochs*
17:00 – 17:30: Yuri Levin – *Formation of accretion discs with magnetic levitation*

Wednesday 19/10/2011:

Morning Session 1: 09:00 – 11:00

Topic: *The ISM of the GC II*

09:00 – 09:30: Michael Burton – *Multiple molecular lines in the Central Molecular Zone*

09:30 – 01:00: Casey Law – *A mass outflow from the Galactic centre*

10:00 – 10:30: Juergen Ott – *Feeding and feedback: molecular gas in the Central Molecular Zone*

Coffee: 10:30 – 11:00

Morning Session II: 11:00 – 13:00

Topic: *The ISM of the GC III*

11:00 – 11:30: Kazufumi Torii – *Large-scale, sensitive CO observations of the CMZ with NANTEN2*

11:30 – 12:00: Yasuo Fukui – *Association of molecular clouds with high-energy features in the CMZ*

12:00 – 12:30: Andrea Stolte – *Forging star clusters at the edge of the CMZ*

12:30 – 13:00: Rei Enokiya – *Molecular observations of the infrared Double Helix Nebula in the Galactic centre*

Lunch: 13:00 – 14:30

Afternoon Session I: 14:30 – 16:30

Topic: *Fermi Bubbles I*

14:30 – 15:00: Meng Su – *Discovery and recent updates on the Fermi Bubbles*

15:00 – 15:30: Troy Porter – *The Fermi-LAT view of the inner Galaxy*

15:30 – 16:00: Vladimir Dogiel – *Radiation from the Galactic centre as a result of active processes there*

Coffee: 16:00 – 16:30

Afternoon Session I: 16:30 – 18:00

Topic: *Fermi Bubbles II*

16:30 – 17:00: Sergei Nayakshin – *Fermi Bubbles: the echo of the last Sgr A*^{*} quasar outburst*

17:00 – 17:30: Roland Crocker – *The Protonic scenario of Fermi Bubble creation*

17:30 – 18:00: Doug Finkbeiner – *An analysis of substructure within the Fermi Bubbles*

Thursday 20/10/2011:

Morning Session 1: 09:00 – 11:00

Topic: *Gamma-rays, HE cosmic ray transport and acceleration*

09:00 – 09:30: Jim Hinton – *Emission from PWN in the GC*

09:30 – 10:00: Aion Viana – *TBD*

10:00 – 10:30: David Ballantyne – *TeV Proton transport in the Galactic centre: Issues and Implications*

10:30 – 11:00: Masha Chernyakova – *Galactic centre at GeV energy range*

Coffee: 11:00 – 11:30

Afternoon Session I: 11:30 – 12:00

Topic: *Gamma-rays, HE cosmic ray transport and acceleration II*

11:30 – 12:00: Vahe Petrosian – *TBD*

12:00 – 12:30: Andy Strong – *The interstellar CR/radio/gamma-ray connection*

Concluding Remarks:

12:30-13:00: Concluding remarks – Felix Aharonian

13:00: Workshop concludes