PREFAE

Galactic Center Workshop 2006

To cite this article: Rainer Schödel et al 2006 J. Phys.: Conf. Ser. 54

View the article online for updates and enhancements.

Related content

- Astronomy at High Angular Resolution 2011: The central kiloparsec in galactic nuclei
  Christof Iserlohe, Vladimir Karas, Melanie Krips et al.

- Flare emission from Sagittarius A*
  A Eckart, M Garcia-Marín, S N Vogel et al.

- Do stellar winds play a decisive role in feeding AGN?
  R Davies, L Burtscher, K Dodds-Eden et al.
Impressions of the Physikzentrum in Bad Honnef.
Contents of the Proceedings

This volume is organized following the order of the speakers during the conference. The schedule of oral presentations below serves as a guide and highlights the topics of the individual sessions. Contributions on poster presentations follow the articles on the oral presentations and are sorted into the order that is shown in the table of the poster presentations below.

Not all authors have submitted their contribution in written form. Existing articles in this volume are indicated by an asterisk behind the name of the author in the tables below.

We recommend strongly the summary article News from the year 2006 Galactic Centre workshop by Sergei Nayakshin and Mark Morris (speakers for the summary talk). It provides a concise overview and highlights some of the most exciting results and debated issues.

Schedule

Session I - Large Scale Structures in the GC:
ISM and Magnetic Fields
Tuesday, April 18
Chairs: Cornelia Lang & Johannes Staguhn

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Welcome</td>
<td>Rainer Schödel &amp; Andreas Eckart</td>
</tr>
<tr>
<td>09:20</td>
<td>The Galactic Center Magnetosphere</td>
<td>Ted LaRosa*</td>
</tr>
<tr>
<td>09:50</td>
<td>The Strength and Structure of the Galactic Center Magnetic Field</td>
<td>Masato Tsuboi*</td>
</tr>
<tr>
<td>10:10</td>
<td>Interaction between the Galactic Center 50-km/s Molecular Cloud and SgrA East Shell</td>
<td>Yasuo Fukui</td>
</tr>
<tr>
<td>10:30</td>
<td>Molecular loops in the Galactic Center: Evidence for magnetic flotation to accelerate molecular gas</td>
<td>Mark Morris*</td>
</tr>
<tr>
<td>11:00</td>
<td>Coffee Break</td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td>Shock Interactions between Sgr A East and its Environs</td>
<td>Sungho Lee*</td>
</tr>
<tr>
<td>12:00</td>
<td>Hot molecular gas in the central region around Sgr A*</td>
<td>Maria Montero-Castano*</td>
</tr>
<tr>
<td>12:30</td>
<td>Physical conditions and molecular chemistry of the Central Molecular Zone</td>
<td>Nemesio Rodríguez-Fernández*</td>
</tr>
</tbody>
</table>

Session II - Large Scale Structures in the GC/Surveys
Tuesday, April 18
Chairs: Fred Baganoff & Masaaki Sakano

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>High energy emission from the GC</td>
<td>Andrea Goldwurm* (invited)</td>
</tr>
<tr>
<td>14:30</td>
<td>New X-ray views of the Galactic Center observed with Suzaku</td>
<td>Katsuji Koyama* (invited)</td>
</tr>
<tr>
<td>15:00</td>
<td>The 6.7-keV iron-line emission in the Galactic Centre</td>
<td>Robert Warwick*</td>
</tr>
<tr>
<td>15:20</td>
<td>Radio Pulsars in the Galactic Center</td>
<td>Joseph Lazio*</td>
</tr>
<tr>
<td>15:40</td>
<td>Coffee Break</td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>Chandra Observations of the Galactic Center: High Energy Processes at Arcsecond Resolution</td>
<td>Daniel Wang* (invited)</td>
</tr>
<tr>
<td>16:30</td>
<td>A Candidate Neutron Star within the Radio Shell of Sgr A East</td>
<td>Sangwook Park*</td>
</tr>
<tr>
<td>16:50</td>
<td>The Arches Cluster and G0.1-0.1 cloud - A view with fluorescent lines</td>
<td>Masaaki Sakano*</td>
</tr>
<tr>
<td>17:10</td>
<td>The H.E.S.S. View of the Central 200 Parsecs</td>
<td>Jim Hinton*</td>
</tr>
<tr>
<td>17:30</td>
<td>Discussion Sessions I + II</td>
<td></td>
</tr>
</tbody>
</table>
Session III - Star Formation at the Center of the Milky Way  
Wednesday, April 19  
Chairs: Janet Simpson & Francisco Najarro

09:00 - 09:20 A mid-infrared survey of the inner 2 x 1.5 degrees of the Galaxy with Spitzer/IRAC  
Susan Stolovy*

09:20 - 09:40 The Stellar Population in the Galactic Center: Insights from the Spitzer Space Telescope  
Angela Cotera*

09:40 - 10:10 The formation of high mass stars  
Cathie Clarke*  
(invited)

10:10 - 10:40 The Two Young Star Disks in the Central Parsec of the Galaxy  
Thibaut Paumard*  
(invited)

10:40 - 11:00 Coffee Break

11:00 - 11:30 Star formation in the GC: observational constraints and theory  
Sergei Nayakshin*  
(invited)

11:30 - 11:50 The Arches cluster - evidence for a truncated MF in the GC?  
Andrea Stolte*  
Sungsoo Kim*  
(invited)

11:50 - 12:20 Estimation of Low-End Mass Function of the Arches Cluster  
Sungsoo Kim*  
Francisco Najarro*  
(invited)

Session IV - The Nuclear Stellar Cluster of the Milky Way  
Wednesday, April 19  
Chairs: Seth Hornstein & Thibaut Paumard

14:00 - 14:30 Stellar Processes near Sgr A*  
Tal Alexander*  
(invited)

14:30 - 14:50 Models of mass segregation at the Galactic Centre  
Marc Freitag*  

14:50 - 15:10 The structure of the GC nuclear stellar cluster  
Rainer Schödel*  

15:10 - 15:30 NIR spectral classification/Dynamics of the stellar cluster  
Thomas Ott  

15:30 - 15:50 Stellar and wind properties of massive stars in the central parsec of the Galaxy  
Fabrice Martins*  

15:50 - 16:10 Coffee Break

16:10 - 16:30 First infrared VLTI fringes on Galactic Center sources  
Jörg-Uwe Pott*  

16:30 - 17:00 Galactic Center Youth: Orbits and Origins of the Young Stars in the Central Parsec  
Jessica Lu*  
(invited)

17:00 - 17:20 Stellar orbits around SgrA*  
Sascha Trippe*  

17:20 - 17:40 On the puzzle of S-stars  
Yuri Levin  

17:40 - 18:00 Massive perturbers in the Galactic Center  
Hagai Perets*  

18:00 - 18:30 Discussion Sessions III + IV

Session V - The Nuclei of Nearby Galaxies  
Thursday, April 20  
Chair: Jim Moran

09:00 - 09:20 Resonant relaxation near massive black holes  
Clovis Hopman*

09:20 - 09:40 Instabilities in Nearly Keplerian Stellar Systems around Massive Dark Objects  
Rachid Touma Jihad  

09:40 - 10:00 Coffee Break

10:00 - 10:30 Molecular gas in nearby galaxies  
Linda Tacconi  
(invited)

10:30 - 10:50 M31*  
Lorant Sjouwerman  

10:50 - 11:10 Radio Linear and Circular Polarization from M81*  
Andreas Brunthaler  

11:10 - 11:40 M81*: a bridge between Sgr A* and LLAGN  
Sera Markoff  
(invited)

1 see article by Jihye Shin
Session VI - The Nuclei of Nearby Galaxies
Thursday, April 20
Chair: Linda Tacconi

14:00 - 14:20 Dusty Tori in Low-Luminosity AGN? Thomas Beckert
14:20 - 14:40 Sub-Milliarcsecond Imaging of SgrA* and M87 Thomas Krichbaum∗
14:40 - 15:00 Radio spectra and radio-loudness of low-luminosity AGNs Akihiro Doi∗
15:00 - 15:20 The Nature of Local Low-Luminosity Galaxies Mercedes Filho∗
15:20 - 15:40 Coffee Break
15:40 - 16:10 Discussion Sessions V + VI

Session VII - Observations of Sagittarius A*
Friday, April 21
Chair: Stefan Gillessen

09:00 - 09:30 The Submillimeter Polarization of Sgr A* Dan Marrone∗(invited)
09:30 - 09:50 Flux monitoring of Sagittarius A* at mm-wavelengths Atsushi Miyazaki∗
09:50 - 10:20 High Resolution Imaging of Sagittarius A* Geoffrey Bower∗(invited)
10:20 - 10:40 Coffee Break
10:40 - 11:00 High-Resolution Millimeter-VLBI Imaging of Sgr A* Zhi-Qiang Shen∗
11:00 - 11:20 Short time variations of SgrA∗ Makoto Miyoshi
11:20 - 11:40 Simultaneous Multi-Wavelength Spectrum of Sgr A* and Long Wavelength Cutoff at λ > 30 cm Tao An∗
11:40 - 12:10 Discussion Session VII

Session VIII - Sagittarius A*: Observations and Theory
Saturday, April 22
Chair: Rainer Schödel

09:00 - 09:30 Multi-wavelength and polarimetric observations of Sagittarius A* Andreas Eckart∗(invited)
09:30 - 09:50 Infrared/X-ray intensity variations and the color of Sgr A* Seth Hornstein∗
09:50 - 10:10 Diffraction Limited Imaging Spectroscopy of a Sgr A* Flare with OSIRIS Alfred Krabbe∗
10:10 - 10:30 Variations in the spectral slope of Sgr A* during a NIR flare Stefan Gillessen∗
10:30 - 10:50 Coffee Break
10:50 - 11:10 Periodic Modulations in an X-ray Flare from Sgr A* Guillaume Belanger∗
11:10 - 11:40 Accretion models of Sgr A* Feng Yuan∗(invited)
11:40 - 12:00 Variable accretion of stellar winds onto Sgr A* Jorge Cuadra∗

Session IX - Sagittarius A*: Observations and Theory
Saturday, April 22
Chair: Tal Alexander

14:00 - 14:20 Testing General Relativity with High-Resolution Imaging of Sgr A* Avery Broderick∗
14:20 - 14:40 The growth of the black hole at the Galactic Center Wolfgang Duschl
14:40 - 15:00 Constraining Dark Matter Properties with Sgr A* Peter Biermann∗∗
15:00 - 15:20 Coffee Break
15:20 - 15:55 Discussion Sessions VIII + IX
15:55 - 16:50 Summary talk and final discussion Mark Morris & Sergei Nayakshin∗

∗ see article by Faustin Munyaneza
Posters

Session I - Large Scale Structures in the GC:
ISM and Magnetic Fields

NH3 observations of the Central Molecular Zone with Kagoshima 6 meter Radio Telescope
An extremely large column density cloud G0.11-0.11 in the Galactic Center region
Nonlinear Reddening Behavior in the Near-Infrared Color-Magnitude Diagram
HI absorption toward the central 250 pc of the Galactic Center
The magnetic field configuration in the Galactic Center Snake
3-D Simulations of the 180-pc Molecular Ring
ISAAC M-band spectroscopy of dust embedded sources at the Galactic Center
Structure of the Galactic Bulge: Is the Milky Way a Double-barred Galaxy?
ASTE Observations of the Galactic Center
ODIN spectral line observations of the Sgr A Complex and Sgr B2 in the 118-119 GHz band and at sub-mm wavelengths
1720 MHz OH masers in Sgr A East and the Circumnuclear Disk
CN in the Sgr A* Environment - First Results
Significance of bulge central density core/cusp on formations of nuclear spirals in barred galaxies

Session II - Large Scale Structures in the GC/Surveys

Viscous Dissipation in the Galactic Center Region
Flamingos 2 Galactic Center Survey
Confirmation of New Supernova Remnants near the Galactic Centre
Low frequency studies of the Galactic Centre with GMRT
Mm-wave recombination line emission towards the GC
Spitzer IRS Observations of the Galactic Center
Circumstellar CO in OH/IR Stars Close to the Galactic Centre
Comparison of Spitzer/IRAC Galactic Center 3.6-8.0μm survey results with X-ray emission in the central 40 × 40 parsecs

Session III - Star Formation in the Center of the Milky Way

Orbital decay of evolving young star clusters in galactic nuclei
Estimation of the Low-End Mass Function of the Arches Cluster
High Spectral Resolution Observations of the Massive Stars in the Galactic Center
Galactic structure and stellar clusters in obscured HII Regions

Session IV - The Nuclear Stellar Cluster of the Milky Way

Ejection of Hyper-Velocity Stars by Intermediate-Mass Black Holes
X-ray constraints on the number of stellar mass black holes in the inner parsec
Thin filaments at the Galactic Center: identification and proper motions
Accurate Measurements of Proper Motions of Maser Objects around the Galactic Center
Photometric Stellar Variability in the Galactic Center

Session V - The Nuclei of Nearby Galaxies

The millimeter variability of M81*
Session VII - Observations of Sagittarius A*
The infrared emission of the dust clouds close to Sgr A*  Yann Clénet*

Session VIII - Sagittarius A*: Observations and Theory
A two component hot spot/ring model for the NIR flares of Sagittarius A*  Leo Meyer*

Session IX - Sagittarius A*: Observations and Theory
Growth of black holes and dark matter accretion  Faustin Munyaneza*