

# Programme

## Monday April 24<sup>th</sup>

8.30-10.00 Registration

10.00-10.10 Welcome address

10.10-11.10 Session 1 AXP's and SGRs: Observations (Chairman: R. Turolla or S. Zane)

V. Kaspi	<i>Anomalous X-ray Pulsars</i>	30'
S. Mereghetti	<i>XMM-Newton view of Soft Gamma-ray Repeaters</i>	30'

11.10-11.30 *Coffee Break*

11.30-13.00 Session 2 AXP's and SGRs: Observations (Chairman: S. Mereghetti)

G.L. Israel	<i>2004: de SGR 1806-20 anno mirabile</i>	20'
A. L. Watts	<i>High frequency oscillations during magnetar flares: evidence for neutron star vibrations</i>	20'
A. Tiengo	<i>Long term spectral variability in the Soft Gamma-ray Repeater SGR 1900+14</i>	20'
E. Gogus	<i>RXTE Observations of SGR 1806-20 Bursts</i>	20'
J. D. Gelfand	<i>Tracking the Remains of the Big One: The Evolving Radio Afterglow of the 27 Dec. 2004 Giant Flare from SGR 1806-20</i>	20'

13.10-14.30 *Lunch Break*

14.30-16.00 Session 3 AXP's and SGRs: Observations (Chairman: V. Kaspi,)

A. G. Lyne	<i>The Pulsar-Magnetar Connection</i>	30'
A. I. Ibrahim	<i>Discovery of a 20 keV Absorption Feature from SGR 1806-20: Evidence of Vacuum Resonance in a Magnetar Atmosphere?</i>	20'
D. Gotz	<i>Unveiling SGR 1806-20 with INTEGRAL</i>	20'
N. Rea	<i>Foresee magnetars' variability</i>	20'

16.00-16.30 *Coffee Break*

16.30-19.00 Session 4 AXP's and SGRs: Observations (Chairman: G.L. Israel)

J. Vink	<i>Magnetars in supernova remnants and magnetar formation scenarios</i>	20'
S. Watcher	<i>Spitzer Observations of SGR and AXP Environments</i>	20'
U. Ertan	<i>On the X-Ray and Infrared Enhancement of Anomalous X-ray Pulsar 1E 2259+58</i>	20'
M. Durant	<i>Intrinsic spectra of magnetars</i>	20'
P. R. den Hartog	<i>AXP 4U 0142+61: New INTEGRAL results and the first simultaneous multi-frequency observation campaign</i>	20'
E. Gotthelf	<i>Transient Anomalous X-ray Pulsar XTE J1810-197: Probing the Emission Mechanisms of Magnetars</i>	20'
B. Gaensler	<i>Chandra Smells a RRAT: X-ray Detection of a New Class of Neutron Stars</i>	30'

## Tuesday April 25<sup>th</sup>

### 9.40-11.00 Session 5 AXPs and SGRs: Observations/Theory (Chairman: L. Stella)

M. E. Gonzalez	<i>Unusual X-ray emission from the young, high magnetic field radio pulsar PSR J1119-6127</i>	20'
R. Fernandez	<i>Modelling the Quiescent keV emission from Magnetars</i>	20'
J. S. Heyl	<i>QED can explain the non-thermal emission from SGRs and AXPs</i>	20'
A. M. Beloborodov	<i>Corona of Magnetars</i>	20'

11.00-11.30 *Coffee Break*

### 11.30-13.00 Session 6 AXPs and SGRs: Theory (Chairman: J. Heyl)

M.G. Baring	<i>Modeling the Hard X-ray Components of Anomalous X-ray Pulsars</i>	30'
L. Stella	<i>Gravitational Radiation from Newborn Magnetars</i>	20'
S. Dall'Osso	<i>Constraining the emission of GW from newborn magnetars</i>	20'
I. Jones	<i>Isolated neutron stars and gravitational waves</i>	20'

13.00-14.20 *Lunch Break*

### 14.20-16.10 Session 7 AXPs and SGRs: Theory

A. Alpar	<i>Isolated Neutron Stars, Cooling and Energy Dissipation</i>	30'
A. Cumming	<i>Magnetic field transport in neutron star interiors</i>	20'
D. Eichler	<i>Transient Heating and Cooling of Neutron Stars</i>	20'
N. Ikhsanov	<i>Accretion by isolated neutron stars</i>	20'
K. Werner	<i>Non-LTE modeling of Supernova fallback Disks</i>	20'

## Wednesday April 26<sup>th</sup>

### 9.30-11.00 Session 8 Isolated NSs: Observations

M.C. Weisskopf	<i>Chandra Observations of Isolated Neutron Stars</i>	30'
M. Cropper	<i>XMM-Newton Observations of the Isolated Neutron Star RBS 1774</i>	20'
A. Treves	<i>Steady and transient blank field sources</i>	20'
B. Posselt	<i>XDINSs as soft X-ray sources</i>	20'

11.00-11.30 *Coffee Break*

### 11.30-13.00 Session 9 Isolated NSs: Observations

F. Haberl	<i>The pulsars among the Magnificent Seven</i>	30'
M.H. van Kerkwijk	<i>Spectra of isolated neutron stars</i>	20'
R.P. Mignani	<i>Studies of Neutron Stars at Optical/IR Wavelengths</i>	20'
V. Malofeev	<i>Radio emission from AXPs and XDINSs</i>	20'

13.00-14.30 *Lunch Break*

14.30-16.10 Session 10 Isolated NSs: Observations

C. Motch	<i>Measuring proper motions of isolated neutron stars with Chandra</i>	20'
F.M. Walter	<i>The Trigonometric Parallax of Geminga. II. Consequences</i>	20'
A. De Luca	<i>The puzzling compact X-ray source in RCW103</i>	20'
P.M. Woods	<i>Evidence for a Binary Companion to the Enigmatic Compact Central Object 1E 1207.4-5209</i>	20'
D. Kaplan	<i>X-ray Timing of two Nearby, Isolated Neutron Stars</i>	20'

16.10-16.40 *Coffee Break*

16.40-19.00 Session 11 Isolated NSs: Theory

J. Pons	<i>The anisotropic thermal emission of magnetized neutron stars</i>	30'
D. Lai	<i>Neutron Star Surfaces and their Radiation</i>	20'
S. Zane	<i>Neutron star surface emission: beyond the dipole model</i>	20'
A. Turbiner	<i>Molecular systems in a strong magnetic field</i>	30'
K. Mori	<i>Magnetized Oxygen atmosphere models and their application to the isolated neutron star 1E 1207.4-5209</i>	20'
W. Ho	<i>Magnetic Hydrogen Atmosphere Models and the Neutron Star RX J1856.5-3754</i>	20'

**20.30 BANQUET AT THE RUSSELL HOTEL**

**Thursday April 27<sup>th</sup>**

9.30-11.00 Session 12 PSRs: Observations

O. Kargaltsev	<i>Thermal Radiation from Pulsars, from X-rays to Ultraviolet</i>	30'
L. Kuiper	<i>Hard X-ray (10-100 keV) timing and spectral properties of young spin-down powered pulsars</i>	30'
V. Zavlin	<i>X-ray emission from millisecond pulsars</i>	30'

11.00-11.30 *Coffee Break*

11.30-13.10 Session 13 PSRs: Observations

E.I. Chuiquin	<i>On real submillisecond pulsations of hard gamma-rays from pulsars and on their modelling</i>	20'
K. McGowan	<i>X-ray Observations of PSR B0355+54 and Its Pulsar Wind Nebula</i>	20'
M.A. Livingstone	<i>New measurements of pulsar braking indices</i>	20'
W. Becker	<i>X-ray Emission Properties of Old Pulsars</i>	20'
T. DeLaney	<i>Constraints on Neutron Star Cooling using Chandra Observations of PSR B1509-58 and PSR B1951+32</i>	20'

13.10-14.30 *Lunch Break*

14.30-15.50 Session 14 PSRs: Observations/Theory

J.A. Gil	<i>Thermal X-ray emission from polar cap in drifting subpulse radio pulsars</i>	20'
W. Hermsen	<i>Vela Pulsar Profiles from the Radio to High-energy Gamma-rays</i>	20'
E.E. Nokhrina	<i>Acceleration of plasma outflows from compact astrophysical sources</i>	20'
A. Timokhin	<i>Could we see oscillations of the neutron star after the glitch in pulsar?</i>	20'

15.50-16.20 *Coffee Break*

16.20-18.50 Session 15 NS Cooling and Interior Structure

A.Y Potekhin	<i>The effects of strong magnetic fields on neutron-star thermal radiation</i>	30'
P. Haensel	<i>EOS of neutron-star cores and spin-down evolution of pulsars</i>	30'
J. Lattimer	<i>Equation of State Constraints from Neutron Stars</i>	30'
S.B. Popov	<i>Neutron star masses: dwarfs, giants and neighbors</i>	20'
F. Burgio	<i>A microscopic equation of state for proto-neutron stars</i>	20'
N. Andersson	<i>Modelling the dynamics of superfluid neutron stars</i>	20'

**Friday April 28<sup>th</sup>**

9.30-11.10 Session 16 NS Cooling and Interior Structure

D.P. Page	<i>Thermal Evolution of Neutron Stars with Strong Magnetic Fields</i>	30'
A. Reisenegger	<i>Internal heating and thermal emission from old neutron stars: constraints on dense-matter and gravitational physics</i>	30'
M. Ruderman	<i>Local surface heating from magnetic field evolution in young neutron stars</i>	20'
A. Kaminker	<i>Cooling of Isolated Neutron Stars With Magnetized Envelopes</i>	20'

11.10-11.40 *Coffee Break*

11.40-12.50 Session 17 NS Cooling and Interior Structure

J.E. Horvath	<i>What do exotic models of compact stars have to offer?</i>	30'
B. Link	<i>Precession as a Probe of the Neutron Star Interior</i>	20'
D.N. Aguilera	<i>Spin-one color superconductivity in compact stars?</i>	20'

12.50-14.30 *Lunch Break*

14.30-15.30 Session 18 NS Cooling and Interior Structure

D. Bandyopadhyay	<i>Exotic bulk viscosity and its influence on neutron star r-modes</i>	20'
S.K. Reddy	<i>Strange Stars: A Crust with Nuggets</i>	20'
K.P. Levenfish	<i>Dichotomy of thermal states of SXRTs vs neutron superfluidity in neutron stars cores</i>	20'

15.30-16.00 *Coffee Break*

16.00-17.00 Session 19 Conclusions

G.G. Pavlov *Concluding remarks I* 30'

J. Trumper *Concluding remarks II* 30'