High Energy Phenomena in Massive Stars

Program of the meeting at the University of Jaén (Spain)

Date 2nd February. 2009 Monday

08:00-09:00 Secretary desk open for registration

Particle acceleration in massive stars

Chairman: *Stan Owocki*

Time	Speaker Name	Title of the contribution
09:00-09:30	Academic and political authorities	*Welcome and opening remarks*
09:30-10:15 Invited review	Don C. Ellison	Diffusive Shock Acceleration: Nonlinear effects and Magnetic Field Amplification
10:15-10:35	Yousaf Butt	Cosmic Rays from Superbubbles
10:35-10:55	Gilles Ferrand	On the shape of the spectrum of cosmic-rays produced inside superbubbles
10:55-11:30		*Coffee break and poster viewing*

Gamma-ray production mechanisms in massive binaries with a compact companion

Chairman: *Félix Mirabel*

Time	Speaker Name	Title of the contribution
11:30-12:00 Invited oral contribution	Valentí Bosch-Ramon	Relevant processes for high energy emission in microquasars harboring massive stars
12:00-12:30 Invited oral contribution	Guillaume Dubus	Gamma-ray production mechanisms in massive binaries with a young pulsar
12:30-12:50	Dimitry Khangulyan	TeV gamma- and X-ray production in LS5039
12:50-13:10	Anabella Araudo	High-energy flares from jet-clump interactions in HMMQs
13:10-13:30	Benoît Cerutti	Anisotropic pair cascading in gamma-ray binaries
13:30-15:00		*Lunch*

The stellar wind connection and feedback effects

Chairman: *Sean Dougherty*

Time	Speaker Name	Title of the contribution
15:00-15:45 Invited review	Ignacio Negueruela	Stellar winds in high-mass X-ray binaries
15:45-16:05	Stan Owocki	Gamma-ray variability from wind clumping in HMXRBs with jets
16:05-16:25	Tsuguya Naito	3-D Numerical Simulations of the Binary System PSR B1259-63/SS 2883 and High Energy Emission from the DISK-Wind interaction Region
16:25-17:00		*Coffee break and poster viewing*

19:30-20:30	Félix Mirabel	*Los agujeros negros y el origen del Universo*: public talk (in Spanish) at the University city center building.
21:00-21:30	Welcome reception & cocktail at the *Salón Mudéjar* of City Hall.	

Date 3rd February, 2009 Tuesday

Gamma-rays in massive star-forming regions

Chairman: *Sylvain Chaty*

Time	Speaker Name	Title of the contribution
09:00-09:45 Invited review	Thierry Montmerle	Gamma-rays from star-forming regions: from SNOBs to Dark Accelerators
09:45-10:05	Gustavo E. Romero	Gamma-rays from massive protostars
10:05-10:25	Yasuo Fukui	Molecular Clouds as a Probe of Highly Energetic Jets
10:25-10:45	Yoshiaki Hyodo	Suzaku spectroscopy of diffuse X-ray emission in the Galactic star forming region M17 and the Carina Nebula
10:45-11:15		*Coffee break and poster viewing*

Non-thermal radio emission in massive gamma-ray emitting stars

Chairman: *Josep M. Paredes*

Time	Speaker Name	Title of the contribution
11:15-12:00 Invited review	Paula Benaglia	Non-thermal radio emission from massive stars
12:00-12:20	Ross Parkin	Non-thermal emission from massive young stellar objects
12:20-12:40	Joanna Skilton	Radio and X-ray observations of the probable new gamma-ray binary HESS J0632+057
12:40-13:00	Ian Stevens	Non-thermal Radio Emission from A stars
13:00-15:00		*Lunch*

15:00-20:00		Trip by bus to visit the Renaissance cities of Úbeda and Baeza near Jaén. Departure at 15:00 from the University Campus (to be confirmed).

Date 4th February, 2009 Wednesday

Gamma-rays from isolated and binary massive stars without compact object

Chairman: *Thierry Montmerle*

Time	Speaker Name	Title of the contribution
09:00-09:45 Invited review	Julian Pittard	Models of the non-thermal emission from early-type binaries
09:45-10:15 Invited oral contribution	Sean Dougherty	Radio observations from Massive binary systems
10:15-10:35	Ronny Blomme	Non-thermal radio emission from colliding-wind binaries
10:35-11:05		*Coffee break and poster viewing*

Chairman: *Julian Pittard*

Time	Speaker Name	Title of the contribution
11:05-11:50 Invited review	Sven Van Loo	Non-thermal radio emission from `presumably' single O stars
11:50-12:10	Víctor Zabalza	XMM-Newton observations of the inner region of MGRO J2019+37
12:10-12:30	Juan R. Sánchez-Sutil	Low-frequency radio observations of the MGRO J2019+37 complex
12:30-12:50	Alvaro J. Muñoz-Arjonilla	Possible alternative counterparts to the SGR-like event towards the gamma-ray binary LS I +61 303
12:50-13:10	tbd	
13:10-15:00		*Lunch*

Other relevant aspects of massive stars

Chairman*: Don C. Ellison*

Time	Speaker Name	Title of the contribution
15:00-15:45 Invited review	Gustavo E. Romero	Massive stars and neutrinos
15:45-16:15 Invited oral contribution	Malcolm J. Coe	The amazing HMXB population of the SMC
16:15-16:35	Vanessa McBride	A long, hard look at massive X-ray binaries in the SMC
16:35-17:05		*Coffee break and poster viewing*

Chairman: Ignacio Negueruela

Time	Speaker Name	Title of the contribution
17:05-17:25	Jürgen Knödlseder	Fermi observations of the Large Magellanic Cloud
17:25-17:45	Sylvain Chaty	High Energy Phenomena in Supergiant X-ray Binaries
17:45-18:05	Juan Antonio Zurita-Heras	X-ray variability in massive X-ray binaries

21:00-23:30		*Conference Dinner at the Castillo de Santa Catalina*

Date 5th February, 2009 Thursday

The new generation of gamma-ray telescopes and future perspectives for massive stars

Chairman: *Sven Van Loo*

Time	Speaker Name	Title of the contribution
09:00-09:30 Invited oral contribution	Isabelle Grenier	*Fermi talk**
09:30-10:00 Invited oral contribution	Stefan Ohm	H.E.S.S. observations of massive stars clusters
10:00-10:30 Invited oral contribution	Jamie Holder	TeV Gamma-ray Observations of Massive Star Systems with VERITAS
10:30-11:00	tbd	
11:00-11:30		*Coffee break and poster viewing*

Chairman: *Paula Benaglia*

Time	Speaker Name	Title of the contribution
11:30-12:00 Invited oral contribution	Marco Tavani	*AGILE talk**
12:00-12:30 Invited oral contribution	Marc Ribó	*MAGIC and CTA talk**

12:30-13:00	Leaded by G. Romero (SOC)	*Final Discussion and Concluding Remarks*

(*) Titles to be confirmed.

Poster contributions: see Book of Abstracts for details.

Conference ends. Departure of participants.