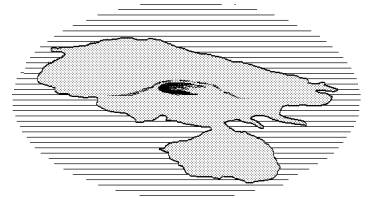


FRASCATI WORKSHOP 2011

May 23 – 28, Vulcano, Italy

MULTIFREQUENCY BEHAVIOUR OF HIGH ENERGY COSMIC SOURCES



T E N T A T I V E P R O G R A M (31st March 2011)

Sunday 22 Afternoon

15.30 REGISTRATION OF PARTICIPANTS
18.45 END OF REGISTRATION
19.15 WELCOME COCKTAIL PARTY
20.00 DINNER

Monday 23 Morning

08.00 REGISTRATION OF PARTICIPANTS
08.35 END OF REGISTRATION
08.40 BEGINNING of the WORKSHOP
08.40 Franco GIOVANNELLI Welcome Address

OPENING REMARKS

Chairperson: NINO PANAGIA

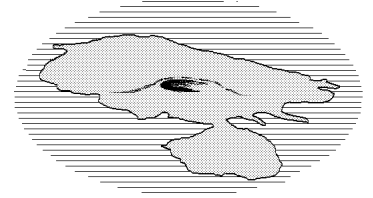
08.45 Franco GIOVANNELLI Multifrequency Behaviour of High Energy
Cosmic Sources: A Review.
09.15 Giulio AURIEMMA The Physics of the Early Universe after
the First Two Years of LHC.
09.45 Richard Conn HENRY Progress in Understanding the Diffuse UV
Cosmic Background.
10.05 Sabrina CASANOVA Cosmic-Ray Barometers.
10.25 Coffee Break

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MULTIFREQUENCY BEHAVIOUR OF HIGH ENERGY COSMIC SOURCES

Monday 23 Morning

OPENING REMARKS

Chairperson: RICHARD CONN HENRY

- | | | |
|-------|--|--|
| 10.55 | Maxim KHLOPOV | Cosmic Sources from Dark Atoms of Composite Dark Matter. |
| 11.25 | M ^a Dolores RODRIGUEZ-FRIAS | What We Can Infer from the Pierre Auger Observatory on Astrophysical Sources of Cosmic Rays? |
| 11.45 | Wolfgang KUNDT | Our Heliosphere Confined by Cosmic Rays. |
| 12.15 | Daniele FARGION | Deep Core and a New 20 GeV Neutrino Astronomy. |
| 12.35 | Susana IGLESIAS-GROTH | Identification of PAHs and Fullerenes in the Interstellar Medium. |
| 13.05 | END OF THE SESSION | |

INTERVAL

Monday 23 Afternoon

COSMOLOGY

Chairperson: PETER BIERMANN

- | | | |
|-------|---------------|---|
| 17.00 | Rafael REBOLO | The Quijote CMB Polarization Experiment: A Search for Primordial Gravitational Waves. |
| 17.30 | Marco REGIS | The CMB in an Inhomogeneous Universe. |
| 17.50 | Takaya NOZAWA | Supernovae as Sources of Dust in the Early Universe. |
| 18.10 | Keiichi MAEDA | Type Ia SN Explosion Mechanism and Implication for Cosmology. |
| 18.30 | Pol BORDAS | Large-Scale Emission from Fanaroff-Riley Galaxies. |
| 18.50 | Andrew PTAK | The Very Local Universe in X-rays. |
| 18.10 | Frank HABERL | X-ray Source Populations in Local Group Galaxies. |

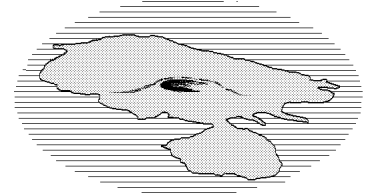
19.30 INTERVAL

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MULTIFREQUENCY BEHAVIOUR OF HIGH ENERGY COSMIC SOURCES

Tuesday 24 Morning

COSMOLOGY

Chairperson: RAFAEL REBOLO

- | | | |
|-------|-------------------------------|--|
| 08.40 | Guennady BISNOVATYI-
KOGAN | Gravitational Lens: A Review. |
| 09.10 | Marco AJELLO | Galaxy Clusters in the SWIFT/BAT Era:
A Review. |
| 09.40 | Gianfranco DE ZOTTI | Which Is the Main Driver of Galaxy
Evolution? Gas Flows versus Mergers. |
| 10.10 | Vincenzo MAINIERI | Host Galaxies Properties of Obscured
Quasars at $z \sim 2$: A Multiwavelength
Approach. |

10.30 END OF THE SESSION

Coffee Break

ASTROPHYSICS OF HIGH ENERGY COSMIC SOURCES

Chairperson: MARCO AJELLO

- | | | |
|-------|-------------------|---|
| 11.00 | Paolo PERSI | Herschel Observations of Star Forming
Regions. |
| 11.30 | Anabella ARAUDO | Massive Protostars as Gamma-Ray Sources. |
| 11.50 | Lorenzo NATALUCCI | Cross-Calibration of X-ray/Soft
Gamma-ray Instruments Using the HE Source
In the Crab Nebula. |
| 12.10 | Paolo PERSI | The Crab Nebula in the Infrared. |
| 12.30 | Norbert SCHARTEL | XMM-Newton Highlights. |

13.00 I N T E R V A L

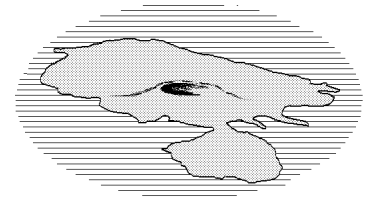
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Tuesday 24 Afternoon

ASTROPHYSICS OF HIGH ENERGY COSMIC SOURCES

Chairperson: JOERN WILMS

17.00	Jean BALLET	Fermi Highlights.
17.30	Roland CROCKER	Fermi Bubbles in the Galactic Center.
17.50	Giuseppe DI SCIASCIO	Gamma-ray Astronomy with the ARGO-YBJ Experiment.
18.10	Immacolata DONNARUMMA	The Blazar Mrk 421: A Short Multifrequency Review.
18.30	Victor OKNYANSKIJ	The Seyfert Galaxy NGC 4151: A Short Multifrequency Review.
18.50	Frank RIEGER	Cen A as a Source of VHE-Gamma Rays and UHE Cosmic Rays.
19.10	Andreas ZEZAS	Multiwavelength Observations of Extragalactic SNRs.

19.30 I N T E R V A L

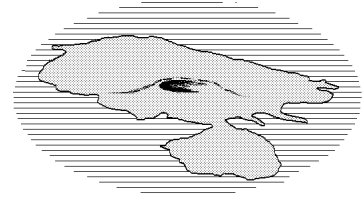
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FRASCATI WORKSHOP 2011

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MULTIFREQUENCY BEHAVIOUR OF HIGH ENERGY COSMIC SOURCES

Wednesday 25 Morning

ASTROPHYSICS OF HIGH ENERGY COSMIC SOURCES

Chairperson: JEAN BALLET

08.40	Thomas BOLLER	AGN Review: The Strong Field Limit and Multiwavelength Synergy Prospects.
09.10	Luigi COSTAMANTE	AGNs in the VHE Gamma-Ray Era: A Review.
09.40	Krzysztof HRYNIEWICZ	The Origin of the Broad Line Region in AGNs.
10.10	Julia BECKER	Multifrequency Behaviour of Starburst Galaxies.

10.40 Coffee Break

Chairperson: THOMAS BOLLER

11.10	Tapas Kumar DAS	On the Time Resolved QPOs in AGNs.
11.30	Martin TLUCZYKONT	Multiwavelength Observations of H.E.S.S. AGNs.
12.00	Michael CHURCH	Z-Track Sources: A Review.
12.30	Solen BALMAN	X-Ray Spectral Characteristics of LMXB Dippers.
12.50	Monika BALUCINSKA-CHURCH	Dipping vs Flaring in LMXB: Resolving the Controversy.

13.20 I N T E R V A L

Wednesday 25 Afternoon

F R E E

Wednesday 25 Night

22.00 **E T R U S C A N W I N E P A R T Y**

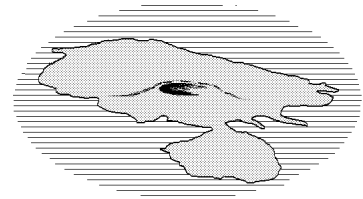
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MULTIFREQUENCY BEHAVIOUR OF HIGH ENERGY COSMIC SOURCES

Thursday 26 Morning

ASTROPHYSICS OF HIGH ENERGY COSMIC SOURCES

Chairperson: JULIA BECKER

08.40	Peter BIERMANN	Supermassive Black Holes.
09.10	Ken EBISAWA	Suzaku Observations of Black Hole Binaries and AGNs.
09.40	Valenti BOSCH-RAMON	Multifrequency Behaviour of Microquasars in GeV-TeV Era: A Review.
10.10	Michael NOWAK	The Microquasar Cyg X-1: A Short Review.

10.30 Coffee Break

Chairperson: RENE HUDEC

11.00	Sabina SABATINI	Cyg X-1 Observations with AGILE.
11.20	Joern WILMS	Polarization of the Hard Tail of Cyg X-1.
11.35	Marat GILFANOV	X-ray Emission from Black Holes: Observations vs Theory.
12.05	Janusz ZIOLKOWSKI	Black Holes in Dormant X-Ray Transients.
12.35	Mauri VALTONEN	The Double Black Hole System OJ287.
12.55	Gemma ANDERSON	Newly Discovered Colliding-Wind Binaries in the Galactic Plane.

13.15 INTERVAL

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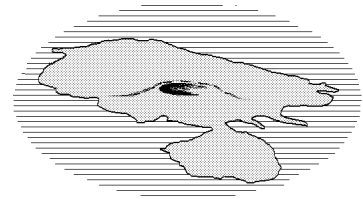
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Thursday 26 Afternoon

ASTROPHYSICS OF HIGH ENERGY COSMIC SOURCES

Chairperson: PIETRO UBERTINI

17.00	Isabel CABALLERO	X-Ray Pulsars: A Review.
17.30	Christian MOTCH	Multifrequency Studies of Galactic X-ray Source Population.
18.00	Simon VOJTECH	Optical Monitoring of Binary X-Ray Sources.
18.30	Pere BLAY	Supergiant Fast X-ray Transient: An INTEGRAL View.
18.50	Mariafelicia DE LAURENTIS	Coalescing Binaries as Possible Standard Candles.
19.10	Pieter MEINTJES	Modeling the IC Gamma-ray Emission from The Be Pulsar Binary System 1259-63.
19.30		INTERVAL

Thursday 28 Night

MUSIC IN VULCANO

21.45 **Opera**

L'Historie du Soldat

Alessandro Perpich - Violin
Valentina Usai - Piano
Lisa Colosimo - Voice
Flavia Giovannelli - Voice

22.45 **END OF CONCERT**

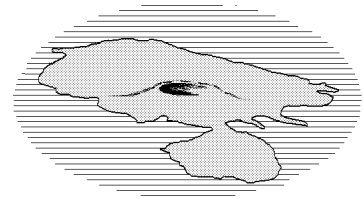
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Friday 27 Morning

Chairperson: ISABELLE CABALLERO

- | | | |
|-------|-----------------|--|
| 08.40 | Pietro UBERTINI | INTEGRAL Discovery of SFXT (Supergiant Fast X-ray Transient): A new Class of Accreting Binaries. |
| 09.10 | Ersin GOGUS | Soft Gamma Repeaters: An Overview. |
| 09.40 | Keiichi MAEDA | Core-Collapse Supernova Diversities: from the Weakest to Most Powerful Explosions. |
| 10.10 | Ralf NAPIWOTZKI | Runaway and Hypervelocity Stars: the Supernova Connection. |

10.30 Coffee Break

Chairperson: ANABELLA ARAUDO

- | | | |
|-------|----------------|--|
| 11.00 | Nino PANAGIA | Unsolved Problems about Supernovae: From HST to SWIFT. |
| 11.30 | Satoru KATSUDA | Supernova Remnants: A Short Review of Recent X-ray Observations. |

11.50 END OF THE SESSION

JET SOURCES & GAMMA-RAY BURSTS

Chairperson: ARNON DAR

- | | | |
|-------|------------------|--|
| 11.50 | James H. BEALL | Jets Interactions with the Ambient Media: A Review. |
| 12.20 | James H. BEALL | Large-Scale Hydrodynamic Modeling of Astrophysical Jets. |
| 12.40 | Ettore DEL MONTE | The Observation of GRBs with AGILE. |

13.00 INTERVAL

Friday 27 Afternoon

Chairperson: PIETER MEINTJES

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MULTIFREQUENCY BEHAVIOUR OF HIGH ENERGY COSMIC SOURCES

16.30	Antonio de UGARTE- POSTIGO	GRBs in the SWIFT Era.
17.00	Stefano COVINO	X-shooter Observations of GRBs and GRB Host Galaxies.
17.30	Lorenzo AMATI	The E_p, j -Eiso Correlation and Fermi GRBs.
18.00	Daniele FARGION	GRBs and SGRs: Are They One Shoot Explosion Or Blazing Jets?
18,20	Eleonora TROJA	Precursors of Short GRBs.
18.40	Ruben SALVATERRA	The Farthest GRBs Similar to the Closest.
19.00	Leopoldo MILANO	Upper Limits of Gravitational-Wave Bursts Associated with GRBs.
19.20	Salvatore CAPOZZIELLO	Cosmography by GRBs.
19.40		INTERVAL

Saturday 28 Morning

JET SOURCES & GAMMA-RAY BURSTS

Chairperson: JAMES H. BEALL

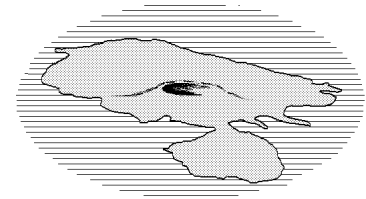
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MULTIFREQUENCY BEHAVIOUR OF HIGH ENERGY COSMIC SOURCES

08.40 Bing ZHANG Models of GRBs.
09.10 Arnon DAR GRBs: What We Have Learnt?

09.40 END OF THE SESSION

ONGOING EXPERIMENTS

Chairperson: WOLFGANG KUNDT

09.40 Jan TAUBER The Planck Mission.
09.55 Mario HAMUY The Chilean Automatic Supernova Search
10.10 René HUDEC The Multifrequency Behaviour of HE Sources
With Ultra Low-Dispersion Spectroscopy.
10.25 Manuel REINA ARANDA The Modular X- and Gamma-ray Sensor (MXGS)
On Atmospheric Space Interaction Monitor
(ASIM) Mission: Engineering Design and
Future Applications.
(CHASE).

10.40 Coffee Break

11.00 Takeshi TSURU The ASTRO-H Mission.
11.15 René HUDEC X-ray Sky Monitoring with Lobster Eye
Telescopes: Recent Progress.
11.30 Joao BRAGA Prospects for GRB Observations with the
MIRAX (Monitor e Imageador de Raios-X):
a Brazilian X-ray Astronomy Satellite Mission.
11.45 Gianpiero TAGLIAFERRI NHXM: a New Hard X-ray Imaging and
Polarimetric Mission.
12.00 Marco GARATTINI Probing Gravity with the Proposed MAGIA, ILN
and Lunette Lunar Mission.
12.15 Bruno Luigi MARTINO An High Availability Data Storage Subsystem
for the INTEGRAL Data Analysis.

12.30 END OF THE SESSION

Saturday 28 Morning

CONCLUDING REMARKS

Chairperson: GIULIO AURIEMMA

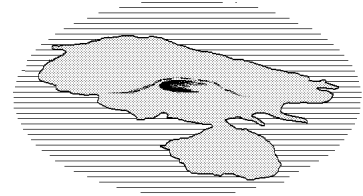
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12.30 Peter BIERMANN
12.40 Gennady BISNOVATYI-KOGAN
12.50 Janusz ZIOLKOWSKI

13.00 END OF THE SESSION

13.00 Franco GIOVANNELLI Concluding Address.

13.15 END OF THE WORKSHOP

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