

Y 2008

Heidelberg
International Symposium
on High Energy Gamma-Ray Astronomy
Heidelberg, Germany, July 7-11, 2008

Scientific Organising Committee

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Andrew Taylor, Brigitte Villaumie, Gabriele Weese, Olga Zacharopoulos

Conference Program

Monday, July 7

9:00-9:20 **Morning Welcome**

9:20-10:00 **Trevor Weekes** “Very High Energy Gamma-Ray Astronomy”

10:00-10:40 **Marco Tavani** “High Energy Gamma Ray Astronomy”

Coffee Break

11:00-11:30 **Tadayuki Takahashi** “Nonthermal X-ray Astronomy”

11:30-12:00 **Rainer Beck** “Galactic and Extragalactic Magnetic Fields”

12:00-12:30 **Joe Silk** “Cosmology and fundamental physics with cosmic gamma rays and neutrinos”

Lunch Break

14:00-14:13 **Jamie Holder** “Status of the VERITAS Observatory”

14:13-14:26 **Ryan Chaves** “The H.E.S.S. Galactic Plane Survey”

14:26-14:39 **Ryoji Enomoto** “Status of CANGAROO-III Project”

14:39-14:52 **Javier Rico** “Results of MAGIC on Galactic sources”

14:52-15:05 **Petra Huentemeyer** “Milagro Measurements of TeV Spectra up to 100 TeV”

15:05-15:18 **Gernot Maier** “Observation of Galactic Gamma-Ray Sources with VERITAS”

15:18-15:31 **Andrea Giuliani** “AGILE’s view of the Galactic plane”

Coffee Break + Poster Session

16:30-16:43 **Gerd Puehlhofer** “X-ray follow-up observations of unidentified VHE gamma-ray sources”

16:43-16:56 **Gloria Dubner** “Radio counterparts for gamma-ray sources”

16:56-17:09 **Robert Wagner** “Scientific highlights from AGN observations with the MAGIC telescope”

17:09-17:22 **Peter Cogan** “VERITAS Blazar Observations - Recent Results”

17:22-17:35 **Chiumun Hui** “VERITAS observations of Extragalactic non-blazars”

17:35-17:48 **Nicola Galante** “MAGIC observation of the prompt and afterglow emission from Gamma-Ray Bursts”

20:00 Public Evening Lecture, Max-Planck-Haus
Max-Planck-Haus, Gerhart-Hauptmann-Str. 36

Tuesday, July 8

9:00-9:30	Christian Spiering	“High Energy Neutrino Astronomy”
9:30-10:00	Karl-Heinz Kampert	“At the Doorway to UHECR Astronomy”
10:00-10:30	Peter Meszaros	“Gamma Ray Bursts”

Coffee Break

11:00-11:30	Laura Maraschi	“Nonthermal properties of relativistic jets of AGN”
11:30-12:00	Amir Levinson	“Gamma ray emission of Blazars”
12:00-12:30	Guy Pelletier	“Particle acceleration in relativistic shocks”

Lunch Break

14:00-14:13	Jean-Philippe Lenain	“PKS2155-304 in July 2006: H.E.S.S. results and simultaneous multi-wavelength observations”
14:13-14:26	Geoffrey Bicknell	“Location of the TeV-emitting region in PKS 2155-304”
14:26-14:39	Rolf Buehler	“Probing Lorentz Invariance with a VHE flare of PKS 2155-304 in July 2006”
14:39-14:52	Luigi Costamante	“And we thought to know them well: the new PKS 2155-304 and 3C279”
14:52-15:05	Manel Errando	“Discovery of Very High Energy Gamma Rays from the Flat Spectrum Radio Quasar 3C279 with the MAGIC Telescope”
15:05-15:18	Markus Boettcher	“Very-High-Energy Emission from Quasars and LBLs”
15:18-15:31	Giovanni Fossati	“Blazar Sequence, Demographics and GLAST”

Coffee Break + Poster Session

16:30-16:43	Fabrizio Tavecchio	“Structured jets: VHE emission of blazars and radiogalaxies”
16:43-16:56	Jun Kataoka	“Chandra Reveals Twin X-ray Jets in the Powerful FR II Radio Galaxy 3C 353”
16:56-17:09	Stefano Vercellone	“AGILE and gamma-ray blazars: the “crazy diamond” and other gems”
17:09-17:22	Vasily Beskin	“On the 1D cylindrical Grad-Shafranov equation”
17:22-17:35	Gennady Bisnovatyi-Kogan	“Large scale magnetic field and advection in accretion disks around black holes”
17:35-17:48	Maxim Barkov	“Gamma ray bursts central machine as magnetically driven collapsar model”
17:48-18:01	Sergey Bogovalov	“Dissipationless disk accretion and formation of jets”

Wednesday, July 9

9:00-9:30	Joel Primack	“Diffuse Extragalactic Background Radiation”
9:30-9:50	Olaf Reimer	“Clusters of Galaxies”
9:50-10:10	Christopher van Eldik	“Very High Energy Gamma Rays from the Central Region of the Galaxy”
10:10-10:30	Gustavo E. Romero	“Gamma Rays from Star Forming Regions”

Coffee Break

Special Session: Physics with the next Generation of Ground-based Instruments

11:00-11:30	Diego Torres	“Future science issues for galactic VHE gamma-ray astronomy”
11:30-12:00	Henric Krawczinski	“Future science issues for extragalactic VHE gamma-ray astronomy”
12:00-12:30	Jim Hinton	“Design studies and the current concepts for future ground-based gamma-ray instruments”

Lunch Break

Special Session: Physics with the next Generation of Ground-based Instruments

14:00-14:20	Stefan Wagner	“Studies of blazares with GLAST and Cherenkov telescopes”
14:20-14:40	Stefan Funk	“Studies of galactic sources with GLAST and Cherenkov telescopes”
14:40-14:53	Jordan Goodman	“Science with the HAWC Observatory”
14:53-15:06	Gavin Rowell	“IACT array performance and design study for multi-TeV gamma-ray astronomy”
15:06-15:19	Vladimir Vassiliev	“The Advanced Gamma-ray Imaging System (AGIS)”
15:19-15:32	Silvia Vernetto	“Gamma ray astronomy with ARGO-YBJ”
15:32-15:45	Manel Martinez	“Towards the ground-based gamma-ray observatory CTA”
15:45-15:58	Andrea Santangelo	“The Simbol-X mission: unveiling the non-thermal Universe”

17:00-20:00 Neckar Boat Tour

Thursday, July 10

9:00-9:30	Karl Menten	“The Radio/(Sub)mm Connection”
9:30-10:00	Yasuo Fukui	“CO observations of the Galactic Disk”
10:00-10:30	Andrew Strong	“Interstellar radiation across 20 decades of energy”

Coffee Break

11:00-11:30	David Thompson	“Pulsars at the Highest Energies: Questions for GLAST and ACTs”
11:30-12:00	John Kirk	“Pulsar Winds”
12:00-12:30	Patrick Slane	“Pulsar Wind Nebulae”

Lunch Break

14:00-14:13	Matthieu Renaud	“Pulsar Wind Nebula candidates recently discovered by H.E.S.S.”
14:13-14:26	Eric Gotthelf	“New Pulsar Wind Nebula Identifications of TeV Gamma-ray Sources”
14:26-14:39	Ocker de Jager	“MHD simulations of composite SNR: The time evolution of PWN parameters”
14:39-14:52	Matthias Kerschhaggl	“Observations of the TeV gamma-ray Binaries PSR B1259-63/SS 2883 and LS 5039 with H.E.S.S.”
14:52-15:05	Thomas Schweizer	“Detection of the crab pulsar above 25GeV by MAGIC”
15:05-15:18	Alberto Pellizzoni	“High-Resolution Timing Observations of Spin-Powered Pulsars with AGILE”
15:18-15:31	Tobias Jogler	“A MAGIC study of the VHE gamma ray binary LS I +61 303”
15:31-15:44	Maria Chernyakova	“Latest X-ray observations of the gamma-ray-loud binary systems”

Coffee Break + Poster Session

17:00-17:13	Jacek Niemiec	“Magnetic turbulence production by cosmic rays drifting upstream of supernova remnant shocks”
17:13-17:26	Yasunobu Uchiyama	“Cosmic-ray acceleration and B-field amplification in SNRs as revealed by X-ray observations”
17:26-17:39	Leonid Ksenofontov	“Non-thermal emission from SNR G1.9+0.3”
17:39-17:52	Brian Humensky	“VERITAS Studies of the Supernova Remnants Cas A and IC 443”
17:52-18:05	Aya Bamba	“Suzaku observations of a TeV unID source, HESS J1745-303”
18:05-18:18	Melitta Naumann-Godo	“Discovery of SN 1006 in Very High Energy Gamma Rays with H.E.S.S.”

19:30	Conference Dinner	
19:00		Walk from the Conference Centre to the dinner location

Friday, July 11

9:00-9:30	Andrea Goldwurm	“Galactic Center”
9:30-10:00	Josep M. Paredes	“Gamma rays from compact binary systems”
10:00-10:30	Jonathan Arons	“Dark Outflows: Dissipation in Relativistic Winds and Jets”

Coffee Break

11:00-11:30	Jacco Vink	“Multiwavelength properties of young supernova remnants”
11:30-12:00	Vladimir Zirakashvili	“On the origin of gamma-radiation of SNRs: hadronic models versus leptonic models”
12:00-12:30	Tony Bell	“Acceleration of particles and generation of magnetic fields”

Lunch Break

14:00-14:13	Anatoly Iyudin	“Resonance absorption processes of high-energy gamma-quanta: what kind of new information they can deliver about early Universe?”
14:13-14:26	Markos Georganopoulos	“Digging the Cosmic Infrared background out of the lobes of a radio galaxy”
14:26-14:39	Tanja Kneiske	“A strict lower limit EBL”
14:39-14:52	Anita Reimer	“Redshift-dependence of gamma-ray absorption in the environments of blazars”
14:52-15:05	Gianfranco Brunetti	“Gamma ray emission from galaxy clusters”
15:05-15:18	Christoph Pfrommer	“High-energy gamma-ray emission from galaxy clusters”
15:18-15:31	Doron Kushnir	“Nonthermal emission from clusters of galaxies”
15:31-15:44	Paolo Coppi	“The Extragalactic Gamma-Ray Background and Pair Cascading”

Concluding Remarks (Felix Aharonian)