

PROGRAM - HEPRO IV

4th Meeting on High Energy Phenomena in Relativistic Outflows

Heidelberg, Germany, July 23-26, 2013

Tuesday, July 23, 2013

8:45-9:20

***Registration**

9:20-9:30

***Welcome**

SESSION 1 (Accretion)

9:30-10:00

Lyubarsky, Yuri

Theory of relativistic jets [IR]

10:00-10:18

Bisnovatyi-Kogan, Genady

Estimation of alpha-viscosity coefficient from observations of non-stationary disk accretion.

10:18-10:36

Zaw, Ingyin

Testing the alpha-disk Accretion Model in the Inner-Most Parsec of AGN with Water Masers

10:36-11:10

***Coffee Break**

11:10-11:28

Giannios, Dimitrios

*The S2 star as a probe of the accretion disk of Sgr A**

11:28-11:46

Ikhsanov, Nazar

Evidence for magnetic accretion in X-ray binaries and AGNs

SESSION 2 (Jets)

11:46-12:06

Kronberg, Philipp

Jets as circuits and transmission lines [HT]

12:06-12:24

Foschini, Luigi

The unification of relativistic jets

12:24-14:00

***Lunch Break**

14:00-14:20

Levinson, Amir

Non-thermal processes in BH magnetospheres [HT]

14:20-14:38

Vincent, Stephane

Very-high energy processes in black hole magnetosphere: the case of M87

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14:38-14:56

Wu, Qingwen

A Physical Link Between Jet Formation and Hot Plasma in Active Galactic Nuclei

14:56-15:14

Fendt, Christian

Formation and collimation of relativistic MHD jets - simulations and radio maps

15:14-15:32

Vila, Gabriela

Proton loading of relativistic jets

15:32-16:00

***Coffee Break**

16:00-16:20

Perucho, Manel

Jet propagation [HT]

16:20-16:38

Gaibler, Volker

Powerful AGN jets in an inhomogeneous interstellar medium

SESSION 3 (Plasma and Acceleration)

16:38-17:08

Sironi, Lorenzo

Non-Thermal Particle Acceleration in Relativistic Magnetized Astrophysical Flows [IR]

17:08-17:28

Lemoine, Martin

Relativistic Shock Acceleration and GRBs [HT]

17:28-17:46

Pelletier, Guy

Collisionless Relativistic Shocks: current driven turbulence and particle acceleration

17:46-18:04

Nishikawa, Kenichi

Radiation from accelerated particles in relativistic jets with shocks, shear-flow, and reconnection

18:04-20:30

***Poster Dinner Session**

PROGRAM - HEPRO IV

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Wednesday, July 24, 2013

9:00-9:20

Baring, Matthew

Multiwavelength Probes of the Environs of Relativistic Shocks in Blazar Jets [HT]

9:20-9:38

Niemiec, Jacek

Studies of nonrelativistic young supernova remnant shocks through kinetic simulations

9:38-9:56

Melzani, Mickael

Differences between PIC, real, and Vlasov-Maxwell plasmas

SESSION 4 (AGN)

9:56-10:26

Krawczynski, Henric

Active Galactic Nuclei at Highest Energies [IR]

10:26-10:50

***Coffee break**

10:50-11:20

Coppi, Paolo

Blazar Phenomenology & Interpretation [IR]

11:20-11:40

Lenain, Jean-Philippe

The H.E.S.S. extragalactic sky [HT]

11:40-11:58

De Caneva, Gessica

The FSRQs 3C 279 and PKS 1510-089: MAGIC latest results and multiwavelength observations

11:58-12:16

Prokoph, Heike

VERITAS observations of relativistic outflows in low- and intermediate-frequency-peaked BL Lac objects

12:16-12:34

Massaro, Francesco

Unidentified gamma-ray sources: new insights on the blazar phenomenon

12:34-14:00

***Lunch Break**

14:00-14:18

Fossati, Giovanni

On the relationship between jet, accretion disk and BLR variability in FSRQs

14:18-14:36

Gerard, Lucie

BL Lac population study at high energies

PROGRAM - HEPRO IV

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14:36-14:54

Kapanadze, Bidzina

Microvariability of 0.3-10 keV Flux in HBL Source PKS 2155-304

14:54-15:12

Barkov, Maxim

Rapid TeV and GeV Variability in AGNs as Result of Jet-Star Interaction.

15:12-15:30

Weidinger, Matthias

The Modeling of Gamma-Rays From Blazars

15:30-16:00

***Coffee Break**

16:00-16:18

Chen, Xuhui

Magnetic field amplification and blazar flares

16:18-16:36

Zacharias, Michael

Time-dependent SSC cooling effects on blazar emission

16:36-16:54

Sahakyan, Narek (by F. Rieger)

On the gamma-ray emission from the core and radio lobes of the radio galaxy Centaurus A

16:54-17:12

Romero, Gustavo E.

Supermassive black hole binaries at high energies

17:12-17:30

Taylor, Andrew

The Need for Local Hard Spectra Sources of Ultra-High Energy Cosmic Ray Nuclei

17:30-17:50

Murase, Kohta

Cosmic Rays and Neutrinos from Gamma-Ray Bursts [HT]

PROGRAM - HEPRO IV

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Thursday, July 25, 2013

SESSION 5 (Pulsars, Wind & Nebulae)

9:00-9:30

De Ona Wilhelmi, Emma

Gamma-observations of Pulsar Wind Nebulae [IR]

9:30-9:50

Buehler, Rolf

The flaring Crab Nebula: Recent observations and interpretations [HT]

9:50-10:08

Kalapotharakos, Constantinos

Gamma-ray pulsar emission. From theory to observations

10:08-10:38

Timokhin, Andrey

Pulsar Magnetosphere [IR]

10:38-11:10

***Coffee Break**

11:10-11:40

Amato, Elena

The theory of Pulsar Wind Nebulae [IR]

11:40-12:10

Bucciantini, Niccolo

Pulsar Wind Nebulae Modeling [IR]

12:10-12:28

Gelfand, Joseph

Modeling the Dynamical and Broadband Spectral Properties of a Pulsar Wind Nebula inside a Supernova Remnant

12:28-14:00

***Lunch Break**

14:00-14:18

Porth, Oliver

Solution to the sigma-problem of Pulsar wind nebulae

14:18-14:36

Mochol, Iwona

Strong electromagnetic waves and the sigma problem in pulsar winds

14:36-14:54

Takamoto, Makoto

Evolution of Plasmoid-Chain in Poynting-Dominated Plasma

14:54-15:12

Bednarek, Wlodek

Gamma-rays from millisecond pulsar population in the Galactic Center

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15:12-15:30

Pavan, Lucia

New results on the puzzling jet of IGR J11014-6103.

15:30-16:00

***Coffee Break**

SESSION 6 (Gamma-Ray Binaries & YSOs)

16:00-16:30

Zabalza, Victor

Gamma-observations of Gamma-Ray Binaries [IR]

16:30-17:00

Chen, Andrew

High-Energy Emission from Microquasars (Cyg X-1/Cyg X-3) [IR]

17:00-17:18

Bosch-Ramon, Valenti

Gamma-ray binaries: the dynamics of shocked stellar-pulsar winds

17:18-17:36

Moldon, Javier

VLBI monitoring of the gamma-ray binary PSR B1259-63

17:36-17:54

Khangulyan, Dmitry

Binary Pulsar System PSR B1259-63 as a Gamma-Ray Emitter

17:54-18:12

Munar-Adrover, Pere

Searching for gamma ray emission in massive star-forming regions

19:00

Conference Dinner

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Friday, July 26, 2013

SESSION 7 (GRBs +)

9:00-9:30

Beloborodov, Andrey

GRB jets (dynamics) [IR]

9:30-9:48

Pozanenko, Alexei

Testing a two-jet model of short Gamma-ray Bursts

9:48-10:06

Inoue, Susumu

Synchrotron gamma radiation from ultrahigh energy cosmic ray nuclei in gamma-ray bursts

10:06-10:24

Tam, Pak-Hin Thomas

Discovery of an extra hard spectral component at >10 GeV in the afterglow of GRB 130427A

10:24-10:50

***Coffee break**

10:50-11:08

Mao, Jirong

Jitter Polarization for GRB Prompt Emission

11:08-11:26

Zanin, Roberta

VHE radiation of the Crab pulsar

SESSION 8 (Instruments, Observatories & Prospects)

11:26-11:44

Lauer, Robert

Gamma-Ray Astronomy with the HAWC Observatory

11:44-12:02

Odaka, Hirokazu

X-ray and gamma-ray polarimetry with ASTRO-H

12:02-12:22

Wagner, Stefan

Probing relativistic outflows with future VHE facilities [HT]

12:22-12:40

Concluding remarks

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