# The 6th Bego Rencontre Summer School

## Monday, 4 July 2022

Morning session: Dark Matter Galactic Center (09:00 - 12:15)

-Conveners: Carlo Luciano Bianco

time [id] title	presenter
09:00 [6] Report on the July 1, 2022 ANVUR ev	aluation of ICRA and ICRANet BIANCO, Carlo Luciano
09:45 [7] Local Cosmology in the Gaia era	SPAGNA, Alessandro
10:07 [34] Local Cosmology in the Gaia era	PAOLA, Re Fiorentin
10:30 [8] TBD	PEISSKER, Florian
11:15 Coffee Break	
11:30 [3] The Intergalactic Medium as a cosmol	ogical probe Prof. VIEL, Matteo

## Tuesday, 5 July 2022

#### Morning session: Dark Matter Galactic Center (09:00 - 13:00)

-Conveners: Aldo Treves

time	[id] title	presenter
	[1] Detectability of primordial black holes as a dark matter candidate with gravitational waves from the Galactic center	RE, Federico
	[36] Detectability of primordial black holes as a dark matter candidate with gravitational waves from the Galactic center	BONDANI, Stefano
10:30	[78] TBD	MIRABEL, Felix
11:15	Coffee Break	
11:30	[13] 2022 ICTP-SAIFR Prize in Classical Gravity and Applications	ARGÜELLES, Carlos Raúl

## Wednesday, 6 July 2022

#### Morning session: Dark Matter Galactic Center (09:00 - 13:00)

#### -Conveners: Piero Rosati

time	[id] title	presenter
09:00	[79] Understanding Gravitational Entropy of Black Holes: A New Proposal via Curvature Invariants	GREGORIS, Daniele
09:45	[15] RAR model: cosmological scales, galactic scales, and DM particle nature	ARGÜELLES, Carlos Raúl
10:30	[80] TBD	ARGÜELLES, Carlos Raúl ARGÜELLES, Carlos Raúl
11:15	Coffe Break	
11:30	[14] Cosmography and tests of the LCDM paradigm with high-precision strong lensing modelling of galaxy clusters	ROSATI, Piero
12:15	[18] Constraining the core-halo structure of fermionic DM in the Galaxy with stellar streams	MESTRE, Martin

## Thursday, 7 July 2022

#### Morning session: AGNs (09:00 - 13:00)

-Conveners: Gregory Vereshchagin

time	[id] title	presenter
09:00	[31] TBD	BOSHKAYEV, Kuantay
09:45	[83] W\$ boson mass tension caused by its right-handed gauge coupling at high energies?	XUE, She-Sheng
10:30	[24] TBD	SAHAKYAN, Narek
11:15	Coffe Break	
11:30	[25] TBD	MIRZOYAN, Razmik
	[84] The importance of the azimuth of sunrise and sunset in Archaeoastronomy: in memory of Francesco Giannini, collaborator of the ICRANet School Department	SIGISMONDI, Costantino

## Friday, 8 July 2022

#### Morning session: Fronteer (09:00 - 13:00)

-Conveners: She-Sheng Xue

time [id] title		presenter
09:00 [28] TBD		LI, Di
09:45 [39] TBD		XIE, Lang
10:10 [41] TBD		JIN, Zhi-Peng
10:30 [82] TBD		LUO, Wentao
11:15 Coffe Bre	eak	
11:30 [32] TBD		HAFIZI, Mimoza
12:15 [85] Obs	ervations of GRB at HE and VHE energies: a long path to success	LONGO, Francesco

## **Monday, 11 July 2022**

### Morning session: Cocoon and BdHN model (09:00 - 13:00)

-Conveners: Yerlan Aimuratov

time	[id] title	presenter
09:00	[46] 3D fundamental plane relation from the high-energy (Fermi-LAT) to the optical wavelengths	DAINOTTI, Maria
09:45	[47] Cosmology with Gamma-Ray Bursts	AMATI, Lorenzo
10:30	[48] Jet propagation, shock breakout and Cocoon emission	NAKAR, Ehud
11:15	Coffe break	
11:30	[51] Photospheric emission from relativistic cocoons	VERESHCHAGIN, Gregory
12:15	[50] TBD	GUETTA, Dafne

## Tuesday, 12 July 2022

#### Morning session: Cocoon and BdHN Model (09:00 - 13:00)

-Conveners: Liang Li

time	[id] title	presenter
09:00	[54] Jet propagation, shock breakout and Cocoon emission	NAKAR, Ehud
09:45	[55] TBD	PIRAN, Tsvi
10:30	[58] Multiscale gravitational astronomy in the Gaia era: general relativistic observables, models and tests for the Galaxy and its constituents. The Milky Way as Einstein's paradigm.	CROSTA, Mariateresa
11:15	Coffee break	
11:30	[59] Slowly rotating thin discs around a central black hole as possible relativistic model of galaxy	KOTLARIK, Petr
12:15	[10] Relativistic models for galaxies	DAVIDE, Astesiano

## Wednesday, 13 July 2022

#### Morning session: Supernovae (09:00 - 13:00)

-Conveners: Maria Dainotti

time	[id] title	presenter
09:00	[63] TBD	DELLA VALLE, Massimo
09:45	[65] Nature of the ultrarelativistic prompt emission phase of GRB 190114C and 180720B	MORADI, Rahim
10:30	[70] The search for jet cocoons in broad line supernovae	IZZO, Luca
11:15	coffee break	
11:30	[66] ULTRASAT mission	WAZMAN, Eli
12:15	[67] Gamma-Ray Bursts Associated with Supernovae. Case studies: 190114C, 190829A, 130427A.	AIMURATOV, Yerlan

## Thursday, 14 July 2022

### Morning session: GRB 171205A and GRB 220101 (09:00 - 13:00)

-Conveners: Carlos Raúl Argüelles

time [id] title	presenter
09:00 [92] Binary-Driven Hypernovae: building blocks and future developments	RUEDA HERNANDEZ, Jorge Armando
09:45 [71] BdHN at large distances (2) spectral analysis	LI, Liang
10:30 [76] GRB 190829A - A Showcase of Binary Late Evolution	WANG, Yu
11:15 Coffee break	
11:30 [73] General discussion	