



# Table of contents

Monday 02 May 2016 .....	1
Tuesday 03 May 2016 .....	2
Wednesday 04 May 2016 .....	3
Thursday 05 May 2016 .....	4
Friday 06 May 2016 .....	6

# Workshop on Perspectives on the Extragalactic Frontier: from Astrophysics to Fundamental Physics | (smr 2843)

## Monday 02 May 2016

### **Session 1 - Observations (1) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall Area (Lower Level 1) (08:45-11:00)**

time	title	presenter
08:45	WELCOME ADDRESS	
09:00	Gravitational wave detection	GIANLUCA MARIA GUIDI
09:45	Overview of IceCube results	CLAUDIO KOPPER
10:30	Coffee Break	

### **Session 2 - Observations (2) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (11:00-14:30)**

time	title	presenter
11:00	Extragalactic gamma-ray background	MARKUS ACKERMANN
11:45	HESS/HESS2 results on extragalactic source properties	ANDREW TAYLOR
12:30	Lunch Break	

### **Session 3 - Data Analysis / 20' talk + 10' discussion - Adriatico Guest House - Kastler Lecture Hall (14:30-16:30)**

time	title	presenter
14:30	Gamma rays: Cross correlations with galaxy catalogs	ALESSANDRO CUOCO
15:00	Decomposing the Extragalactic Gamma Ray Background using the Non-Poissonian Template Fit	BEN SAFDI
15:30	Gamma rays: Angular anisotropies	MATTIA FORNASE
16:00	Coffee Break	

### **Session 4 - Interpretations (1) / 20' talk + 10' discussion - Adriatico Guest House - Kastler Lecture Hall (16:30-20:00)**

time	title	presenter
16:30	Angular correlation studies with neutrinos, UHECRs and sources	SOEBUR RAZZAQUE
17:00	Latest Fermi-LAT results on EBL gamma-ray attenuation	ALBERTO DOMINGUEZ
17:30	Fermi LAT/ACT connection	JONATHAN BITEAU
18:00	RECEPTION	

## Tuesday 03 May 2016

### **Session 5 - Observations (3) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (09:00-11:00)**

time	title	presenter
09:00	Overview of the Pierre Auger Observatory Results	SERGUEI VOROBIOV
09:45	Radio sources and their cosmic evolution: Predictions for the SKA	VERNESA SMOLCIC
10:30	Coffee Break	

### **Session 6 - Interpretations (2) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (11:00-14:30)**

time	title	presenter
11:00	Interpretation of results on cosmic neutrinos	MARKUS AHLERS
11:45	Intergalactic Magnetic Fields	STEFANO GABICI
12:30	Lunch Break	

### **Session 7 - Observations and Interpretations / 20' talk + 10' discussion - Adriatico Guest House - Kastler Lecture Hall (14:30-16:30)**

time	title	presenter
14:30	Gamma-ray detections of star forming galaxies	KEITH BECHTOL
15:00	Fermi LAT point source population studies	MATTIA DI MAURO
15:30	Neutrino-gamma ray connection	SHIN'ICHIRO ANDO
16:00	Coffee Break	

### **Contributed Talks / 10' talk + 5' discussion - Adriatico Guest House - Kastler Lecture Hall (16:30-18:00)**

time	title	presenter
16:30	GRB neutrino limits from Auger	LILI YANG
16:45	Cosmogenic neutrinos challenge the cosmic ray proton dip model	DENISE BONCIOLI
17:00	Tidal disruption events as possible sources of UHECRs	AURORA CLERICI
17:15	Cosmic-Ray Acceleration in galactic Interactions and its implications	TIJANA PRODANOVIC
17:30	Star formation and high energy neutrinos at IceCube: a correlation? (20' talk + 10' discussion)	CECILIA LUNARDINI

## Wednesday 04 May 2016

### **Session 8 - Models (1) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (09:00-11:00)**

time	title	presenter
09:00	AGN emission models 1	MARKUS BOETTCHER
09:45	Extreme HBLs as probes for fundamental physics and cosmology	GIACOMO BONNOLI
10:30	Coffee Break	

### **Session 9 - Fundamental Physics (1) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (11:00-14:30)**

time	title	presenter
11:00	Gamma-ray constraints on Axion-like particles	MANUEL MEYER
11:45	Overview of Self-interacting dark matter models and signatures	SEAN TULIN
12:30	Lunch Break	

### **Session 10 - Fundamental Physics (2) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (14:30-22:30)**

time	title	presenter
14:30	DM clustering 1: Stellar vs AGN feedbacks	TOM THEUNS
15:15	Dark matter properties and their impact on structure formation	OLIVER HAHN
16:00	Coffee Break	
16:30	FREE TIME	
19:30	CONFERENCE DINNER - Restaurant LEGA NAVALE	

## Thursday 05 May 2016

### **Session 11 - Future experiments / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (09:00-11:00)**

time	title	presenter
09:00	Status of the CTA Observatory	DAVID SANCHEZ
09:45	Overview of the results from HAWC	MIGUEL MOSTAFA
10:30	Coffee Break	

### **Session 12 - Models (2) / 20' talk + 10' discussion - Adriatico Guest House - Kastler Lecture Hall (11:00-14:30)**

time	title	presenter
11:00	Gamma-ray Bursts Emission Models 1	ZELJKA BOSNJAK
11:30	Gamma-ray Bursts Emission Models 2	ANDREJA GOMBOC
12:00	Gamma-ray Bursts observations with Fermi	MAGNUS AXELSSON
12:30	Lunch Break	

### **Session 13 - Fundamental Physics (3) / 20' talk + 10' discussion - AGH (Kastler Lecture Hall) (14:30-16:30)**

time	title	presenter
14:30	Heavy dark matter - neutrino signatures	ARMAN ESMAILI TAKLIMI
15:00	Heavy dark matter - UHECR signatures	ROBERTO ALOISIO
15:30	Contributed Talk (10' + 5'): Dark Matter scenarios at IceCube	STEFANO MORISI
15:45	Contributed Talk (10' + 5'): Dark matter from Dwarf galaxies with 4 yr IceCube HESE events	REETANJALI MOHARANA
16:00	Coffee Break	

### **Contributed Talks / 10' talk + 5' discussion - Adriatico Guest House - Kastler Lecture Hall (16:30-18:15)**

time	title	presenter
16:30	Pushing the Limits: High Redshift Fermi-LAT Blazars	DARIO GASPARRINI
16:45	Unification in AGN based on evolution	COSTECIA ONAH
17:00	Galaxy clustering in EAGLE compared to GAMA and Illustris simulations	MARIA CELESTE ARTALE
17:15	Identifying the origin of the Galactic TeV gamma-ray excess	JOVANA PETROVIC
17:30	Neutrino constraints to the diffuse gamma-ray emission from accretion shocks	ALEKSANDRA CIPRIJANOVIC
17:45	WIMPY Baryogenesis	SUDHANWA PATRA

18:00	Probing high-scale physics using gravitational wave detectors	BHUPAL DEV
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## Friday 06 May 2016

### **Session 14 - Interpretations (3) / 20' talk + 10' discussion - Adriatico Guest House - Kastler Lecture Hall (09:00-11:00)**

time	title	presenter
09:00	Fermi LAT follow up of the GW events TBC	SARA BUSON
09:30	Counterparts to single neutrinos	MATTHIAS KADLER
10:00	Dark matter constraints from isotropic gamma-ray flux	MICHAEL GUSTAFFSON
10:30	Coffee Break	

### **Session 15 - Interpretations (4) / 30' talk + 15' discussion - Adriatico Guest House - Kastler Lecture Hall (11:00-12:30)**

time	title	presenter
11:00	Fast Radio Bursts	ANDREA POSSENTI
11:45	Multi-messenger source models: neutrinos-UHECR connections	MAURICIO BUSTAMANTE