

## **Enclosure 4**





# International Center for Relativistic Astrophysics Network

[HOME PAGE](#) [ORGANIZATION](#) [MEETINGS](#) [RESEARCH](#) [IRAP Ph.D.](#) [LINKS](#) [CONTACT US](#) [SEARCH IN THE SITE](#)

## IRAP Ph.D. ERASMUS MUNDUS SCHOOL - FEBRUARY 2014

[ Back ]



### ORGANIZATION

[ICRANet Seats](#)  
[Members](#)  
[Universities](#)  
[Director and Staff](#)  
[Personal Pages](#)

### MEETINGS

[Upcoming Meetings](#)  
[IYA 2009 Meetings](#)  
[Marcel Grossmann](#)  
[Galileo - Xu Guangqi](#)  
[William Fairbank](#)  
[Italian-Korean](#)  
[Italian-Sino Meeting](#)  
[ICRANet Workshops](#)  
[Stueckelberg Meeting](#)  
[C. Lattes Meeting](#)  
[Sobral Meetings](#)  
[Bego Rencontre](#)  
[Urca Meetings](#)  
[Zeldovich Meetings](#)  
[Meetings in Armenia](#)  
[Other Meetings](#)  
[Erasmus Mundus Schools](#)  
[Weekly Seminars](#)  
[Yearly Scientific Meeting](#)

### RESEARCH

[Research Groups](#)  
[Visiting Scientists](#)

### PUBLICATIONS

[Books](#)  
[Proceedings](#)  
[Articles Database](#)

**Visitors:** 3672785

We have 3 guests online

## Nice Winter School

February, 23 - March, 2 - 2014



### Program Location Accommodation

#### Directors:

Prof. Remo Ruffini - Prof. Pascal Chardonnet

#### Faculty:

Giovanni Amelino-Camelia, Vladimir Belinski, Carlo Luciano Bianco, Donato Bini,  
 Sandip Kumar Chakrabarti, Pascal Chardonnet, Christian Cherubini, Thibault Damour,  
 Alessandro De Angelis, Jann Einasto, Simonetta Filippi, Sergio Frasca,  
 Filippo Frontera, Jean-Marc Gambaudo, Yipeng Jing,  
 Hagen Kleinert, Jutta Kunz-Drolshagen, Claus Lämmerzahl, Olivier Legrand,  
 Francois Mignard, Hermann Nicolai, Mario Novello, Elène Politano,  
 Kjell Rosquist, Jorge Rueda, Remo Ruffini, Felix Ryde,  
 Aldo Treves, Farrokh Vakili, Gregory Vereshchagin, She Sheng Xue, Shuangnan Zhang

#### Secretariat IRAP PhD:

ICRANet staff - Emmanuel Losero

*The carnival period in Italy is from 4 to 8 March, in Germany from 27 February to 5 March  
 and in Nice is from 14 February to 4 March.*

For suggestions&comments write to the [Webmaster](#)





# Program of the IRAP PhD School of Nice

Nice, February 2014

	Monday 24	Tuesday 25	Wednesday 26	Thursday 27	Friday 28
Chairpersons	Chardonnet	Xue	Della Valle	Belinski	Frontera
9.00	Ruffini	Ludwig	Della Valle	Belvedere	Meeting IRAP PhD
9.45	Izzo	Izzo	Muccino	Belvedere	Meeting IRAP PhD
10.30			Pisani	Pisani	Meeting IRAP PhD
<b>11.15-11.30</b>	<b>Coffee Break</b>	<b>Coffee Break</b>	<b>Coffee Break</b>	<b>Coffee Break</b>	<b>Coffee Break</b>
11.30	Fraga	Fraga	Arguelles	Gomes	Meeting IRAP PhD
12.15	Perlick	Perlick	Arguelles	Belinski	Meeting IRAP PhD
<b>13.00-15.00</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>
15.00	Rakshit	Rosati	Caminha	Belinski	Lämmerzahl
15.45	Dereli	Rosati	Xiaofeng	Xue	Maiolino
16.30	Khorrami	Strobel	Muccino	Yuanbin Wu	Lisakov
17.15	Wang Yu	Della Valle		Bardho	Vakili
18.00	Gomes	Castignani		Lämmerzahl	

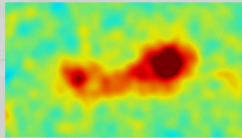


# Subatomic particles, Nucleons, Atoms, Universe: Processes and Structure

10-14 March 2014, National Academy of Sciences, Minsk, Belarus

The 8 of March 2014 signs the 100th Anniversary of the birth of Yakov Borisovich Zeldovich in Minsk.

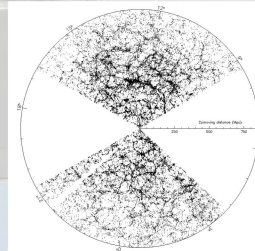
In this occasion International Center for Relativistic Astrophysics Network (ICRANet) together with the National Academy of Sciences of Belarus organize an international conference to be held in Minsk, Belarus in March 10-14, 2014. Participation from neighboring countries such as Estonia, Latvia, Lithuania, Poland, Russia and Ukraine as well as from Europe and the Americas is expected. Exceptionally wide research interests of Ya. B. Zeldovich ranging from chemical physics, elementary particle and nuclear physics to astrophysics and cosmology provide the topics to be covered at the conference.



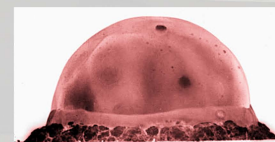
Sunyaev-Zeldovich effect



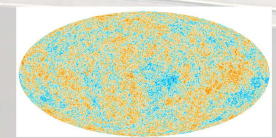
Katyusha



Large scale structure of the Universe



Blast wave, A&H bomb



Cosmic microwave background radiation

## International Organizing Committee

**Armenia:** Felix Aharonian **Belarus:** Sergey Ablameyko, Vladimir Baryshevsky, Il'ya Feranchuk, Vladimir Gusakov, Vladimir Kabanov, Sergei Kilin (*co-Chair*), Yuri Kurochkin, Vyacheslav Kuvshinov, Oleg Penyazkov, Nikolai Shumeiko  
**Brazil:** João Braga, Mario Novello **Estonia:** Jaan Einasto  
**France:** Pierre Coulet, Maxim Khlopov **Germany:** Hagen Kleinert, Rashid Sunyaev (*co-Chair*) **India:** Sandip Chakrabarti  
**Italy:** Vladimir Belinski, Carlo Luciano Bianco, Jorge Rueda, Remo Ruffini (*co-Chair*), Lev Titarchuk, Gregory Vereshchagin, She-Sheng Xue **New Zealand:** Roy Kerr  
**Russia:** Zhores Alferov (*co-Chair*), Yuriy Baryshev, Gennady Bisnovatyi-Kogan, Valeri Chechetkin, Artur Chernin, Andrei Doroshkevich, Vladimir Fortov, Semen Gershtein, Rady Ilkayev, Isaak Khalatnikov, Mikhail Kovalchuk, Gennady Kulipanov, Vladimir Kurt, Victor Matveev, Igor Novikov, Askol'd Perelomov, Vladimir Popov, Valery Rubakov, Nikolai Shakura, Aleksei Starobinsky, Vladimir Surdin **Ukraine:** Anatoliy Zagorodniy  
**United Kingdom:** Alexander Polnarev **USA:** David Arnett, Stanley Deser, Riccardo Giacconi, Vladimir Krasnopolsky, Andrei Linde, John Mester, Boris Zeldovich **Vatican State:** José Funes

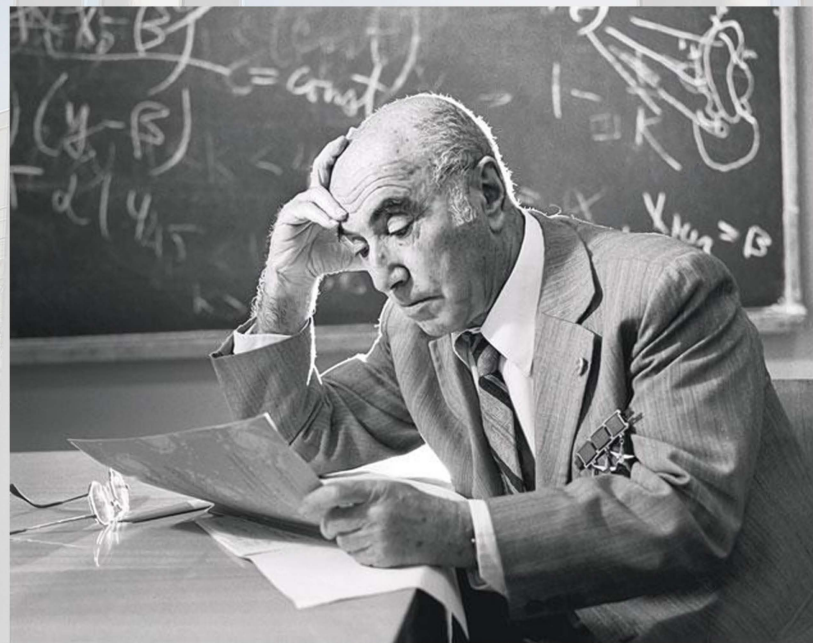
Registration at: [www.icranet.org/zeldovich2014](http://www.icranet.org/zeldovich2014)

## Local Organizing Committee

Victor Anischik (BSU), Aleksander Garkun (NASB), Sergei Kilin (*Chair*, IoP NASB), Vladimir Kabanov, IoP NASB), Yuri Kurochkin (*Vice-Chair*, IoP NASB), Andrei Kuzmin (JIPNR Sosny), Aleksander Mihnevich (Ministry of Foreign Affairs), Albert Minkevich (BSU), Irina Nikonchuk (IoP NASB), Valentin Orlovich (BRFFR), Oleg Penyazkov (HMTI NASB), Vladimir Podkopaev (NASB), Yauhen Safronau (IoP NASB), Leonid Simonchik (IoP NASB), Dmitry Shoukavy (IoP NASB), Roman Shulyakovskii (IoP NASB), Vladislav Stepanov (IoP NASB), Sergrei Tihomirov (NASB), Aleksander Tuzikov (JIPI NASB), Aleksander Zhuk (Ministry of Education)

## Contacts:

[zeldovich2014@icranet.org](mailto:zeldovich2014@icranet.org)  
[yukuroch@dragon.bas-net.by](mailto:yukuroch@dragon.bas-net.by)



Ministero degli Affari Esteri



Республіка Білорусь



Tartu Observatoorium



Observatoire de la CÔTE d'AZUR



SAPIENZA UNIVERSITÀ DI ROMA



Universität Bremen



Max-Planck-Institut für Gravitationsphysik (Albert-Einstein-Institut)



CARL VON OSSIETZKY UNIVERSITÄT OLDENBURG





Subatomic particles, Nucleons, Atoms, Universe: Processes and Structure  
International conference in honor of Ya. B. Zeldovich 100th Anniversary

Final program

Morning session

10 March 08:00-09:00 Registration (in front of the conference hall)

	Monday, 10 March	Tuesday, 11 March	Wednesday, 12 March	Thursday, 13 March	Friday, 14 March
	<i>Relativistic astrophysics, cosmology</i>	<i>GRBs, bombs, detonations</i>	<i>Astrophysics and cosmology</i>	<i>Relativistic astrophysics</i>	<i>Cosmology</i>
Morning	Chairman: Sergei Kilin	Chairman: Vyacheslav Kuvshinov	Chairman: Yurii Kurochkin	Chairman: George Krylov	Chairman: Alexander Gorbatsievich
08:55-09:00	Welcome address by Zhores Alferov				
09:00-09:40	Remo Ruffini “A message of Zeldovich in the GRB era”	Marco Muccino “On the Binary Driven Hypernovae and the nested properties of their X-ray afterglows“	Mikhail Sazhin “Search for cosmic strings”	Nikolai Shakura “Wind Accretion: Theory and Observations”	Andrey Doroshkevich “Beyond the Lambda-CDM cosmology: complex composition of dark matter”
09:40-10:20	Vladimir Belinski “Generic solution with Friedman-like Big Bang”	Yu Wang “GRB 130427A and SN 2013cq: Multi-wavelength Analysis of An Induced Gravitational Collapse Event”	Alexey Aksenov “Radiative transfer in relativistic plasma outflows and comptonization of photons near the photosphere”	Sandip Chakrabarti “Black Hole Astrophysics and the contribution of Zeldovich”	Marek Demianski “Cosmological constant - a brief history and recent results”
10:20-10:40	Coffee break				
10:40-11:20	Alexei Starobinsky "Quantum-gravitational particle creation and generation of metric fluctuations in cosmology"	Sergei Frolov “Controlled Detonation Combustion: Modeling and Experimentation”	Kuantay Boshkaev “Defining multipole moments of neutron stars from QPOs”	Lev Titarchuk “X-ray spectral index correlations vs mass accretion rate in neutron star and black hole X-ray binaries in their different spectral states. Theory vs observations”	Arthur Chernin "Dark energy in systems of galaxies"
11:20-12:00	Gennady Bisnovatyi-Kogan “Outer parts of large galactic clusters in presence of a dark energy”	Oleg Penyazkov “Cellular structure of detonation waves”	Valery Chechetkin “History of modeling of supernovae explosion ”	Sergei Moiseenko “Development of the magneto-differential-rotational instability”	Maxim Khlopov “Zeldovich's legacy in Cosmoparticle physics”
12:00-12:40				Alexei Pozanenko “Gamma-ray Burst GRB 130427A as a classical GRB registered from radio to GeV”	Ivan Siutsou “Dark Matter Massive Fermions and Einasto Profiles in Galactic Haloes”

12:40-15:00 Lunch

Social program:

10 March 18:00 Welcome party

11 March 19:00 Conference dinner

12 March 14:00 Trip to Belarusian State Museum of Folk Architecture and Rural Lifestyle

12 March 19:00 “Nutcracker” ballet, the National Academic Bolshoi Opera and Ballet Theatre



Afternoon session 1 (Hall B)

	Monday, 10 March	Tuesday, 11 March	Wednesday, 12 March	Thursday, 13 March	Friday, 14 March
	<i>High energy physics</i>	<i>Chemical physics</i>			<i>Gravitation</i>
Afternoon	Chairman: Herman Mosquera Cuesta	Chairman:			Chairman: Sandip Chakrabarti
15:00-15:30	Hendrik Ludwig <i>"Collective Electronic Pulsation of Compressed Atoms"</i>	Aleksandr Voitovich <i>"The Kinetics of Diffusion Components Reactions and the Distribution of Components over Distances between Them"</i>			Grasiele Batista dos Santos <i>"Perturbation theory of a cosmological model with non-null Weyl tensor"</i>
15:30-16:00	Viacheslav Kuvshinov <i>"Colour Particles Propagation Through QCD Vacuum Media"</i>	Andrei Smetannikov <i>"High temperature hydrodynamics of explosions and shock wave phenomena"</i>			Alexander Silenko <i>"General description of Dirac particle in Riemannian spacetimes"</i>
16:00-16:30	Coffee break				
16:30-17:00	Halina Grushevskaya <i>"Effects of resonant spin states in strongly correlated many-electron systems"</i>	Sergey Fisenko <i>"The Renaissance of the Becker–Doring–Zeldovich Theory of Nucleation Kinetics"</i>			Anton Ryabushko <i>"New in the relativistic theory of the motion of bodies in space"</i>
17:00-17:30	Vladimir Pletyukhov <i>"Massless and Massive Gauge-Invariant Fields in the Theory of Relativistic Wave Equations"</i>	Pavel Grinchuk <i>"Statistical description of the influence of random spatial distribution of solid particles in a gas suspension on the propagation of combustion front"</i>			Sergei Cherkas <i>"Solution of the discrete Wheeler-deWitt equation in the vicinity of small scale factors and quantum mechanics in spaces of the negative constant curvature"</i>
17:30-18:00	Valery Sobol <i>"Waves of helicon type in conductors and semimetals"</i>	Oscar Rabinovich <i>"Filtration Combustion of Solid Fuels: Models and Stability Problem "</i>			

Afternoon session 2 (Hall A)

	Monday, 10 March	Tuesday, 11 March	Wednesday, 12 March	Thursday, 13 March	Friday, 14 March
	<i>Astrophysics and cosmology</i>	<i>Gravitation</i>		<i>Gravity, astrophysics and cosmology</i>	<i>Alternative gravity</i>
Afternoon	Chairman: Lev Titarchuk	Chairman: Vladimir Belinski		Chairman: Marek Demianski	Chairman: Ivan Siutsou
15:00-15:30	Carlos Arguelles “Dark matter halos and super massive dark objects at sub-parsec scales: the nature of the dark matter particle”	Fernanda Gomes de Oliveira “Gravitational waves vs. X and Gamma rays emission in a short gamma-ray burst”		Eduardo Bittencourt “Geometric Scalar Theory of Gravity”	Jonas Pereira “Black hole mass decomposition in nonlinear electrodynamics and some of its consequences”
15:30-16:00	Bruno Svertut Arsioli “Studying an IR-based sample of VHE $\gamma$ -ray blazars candidates”	George Pogosyan “The Kepler–Coulomb Problem on $SO(2,2)$ Hyperboloid”		Viktor Red'kov “On geometry influence on the behavior of a quantum mechanical scalar particle with intrinsic structure in external magnetic and electric fields”	Herman Mosquera Cuesta “Nonlinear electrodynamics mechanism for formation of astrophysical charged black holes during gravitational collapse of massive stars”
16:00-16:30	Coffee break			Coffee break	
16:30-17:00	Albert Minkevich “Gravitational interaction and gauge approach to gravitation”	Pavel Efremov “Innermost stable circular orbits of spinning particles in Schwarzschild and Kerr metric”		Alexander Gorbatsievich “Exact spherically symmetric static solution for a charged central body within the framework of the 5-dimensional projective unified field theory”	Yury Tsalkou “Primordial Black Holes as a unique tool for early Universe exploration”
17:00-17:30	Elena Ovsiyuk “Dirac particle in presence of a magnetic charge in de Sitter Universe: exact solutions and transparency of the cosmological horizon”	Igor Kanatchikov “Precanonical quantization approach to quantum gravity”		Oleg Tsupko “Influence of plasma on effects of gravitational lensing”	Voldemar Kudin “Limiting energy density and a regular gravitating spherically symmetric objects in Riemann-Cartan spacetime”
17:30-18:00				Lev Tomilchik “Space-time scale noninvariance of the conformal geometry and its observable manifestations”	
18:00-18:30				Valentin Gilewsky “Three ways to search for dark matter particles”	
18:30-19:00				Yuri Vyblyi “Scalar-tensor theory of gravitation in Minkowski space-time”	

Afternoon session 3(Hall C)

	Monday, 10 March	Tuesday, 11 March	Wednesday, 12 March	Thursday, 13 March	Friday, 14 March
	<i>Field theory</i>	<i>High energy physics</i>		<i>High energy physics</i>	<i>Field theory</i>
Afternoon	Chairman: Valery Shaparau	Chairman:		Chairman: Yakov Shnir	Chairman: Yuri Vyblyi
15:00-15:30	Mikhail Galynskii “On the Physical Meaning of the Sachs Form Factors of the Proton and on the Violation of the Dipole Dependence of $G_E$ and $G_M$ on $Q^2$ ”	Oleg Boyarkin “Heavy neutrinos in the left-right model”		Elena Kokoulina “The title Studies of $pp$ interactions at high multiplicity at U-70”	Eckhard Stobel “Fractional Effective Action at strong electromagnetic fields”
15:30-16:00	George Krylov “Pair production and magneto-electric effects in graphene monolayer quantum transport: quasi-relativistic approach”	Yuriy Chernichenko “On relativization of physical features of strong interactions within the framework of the relativistic quasipotential approach”		Andrei Tsytrinov “Spin determination of the 125 GeV diphoton resonance with centre-edge asymmetry at LHC”	Mikhail Sergeenko “Complex masses of resonances in the potential approach”
16:00-16:30	Coffee break			Coffee break	
16:30-17:00	Alexey Sery “To the Problem of Compton Rotation of Photons in Strong Magnetic Field. Limit of total spin polarization of electrons”	Yakov Shnir “Broken baby Skyrmions”		Inna Serenkova “Identifying large extra dimensions in dilepton and diphoton production at the Large Hadron Collider”	Valery Shaparau “Occurrence of squeezed and entangled gluon states in QCD and their influence on intermittency of hadrons”
17:00-17:30	Ilya Bobovnikov “Constraints on Extra Neutral Gauge Bosons from $W^+W^-$ Production at the ILC”			Olga Solovtsova “Manifestation of quark-hadron duality in $e^+e^-$ annihilation into hadrons”	Yurii Kurochkin “The Coulomb Green's function in curved space”
17:30-18:00			Kanstantsin Babich “Behavior and collapse of wave function of two-particles bound system with the Cornell potential”	Nikolai Rogovtsov “Aplication of General Invariance Relations Reduction Method to Solution of Mathematical Physics Problems”	
18:00-18:30			Vasili Andreev “Constraints on Z-Z' mixing from $W$ pair production at the LHC”		

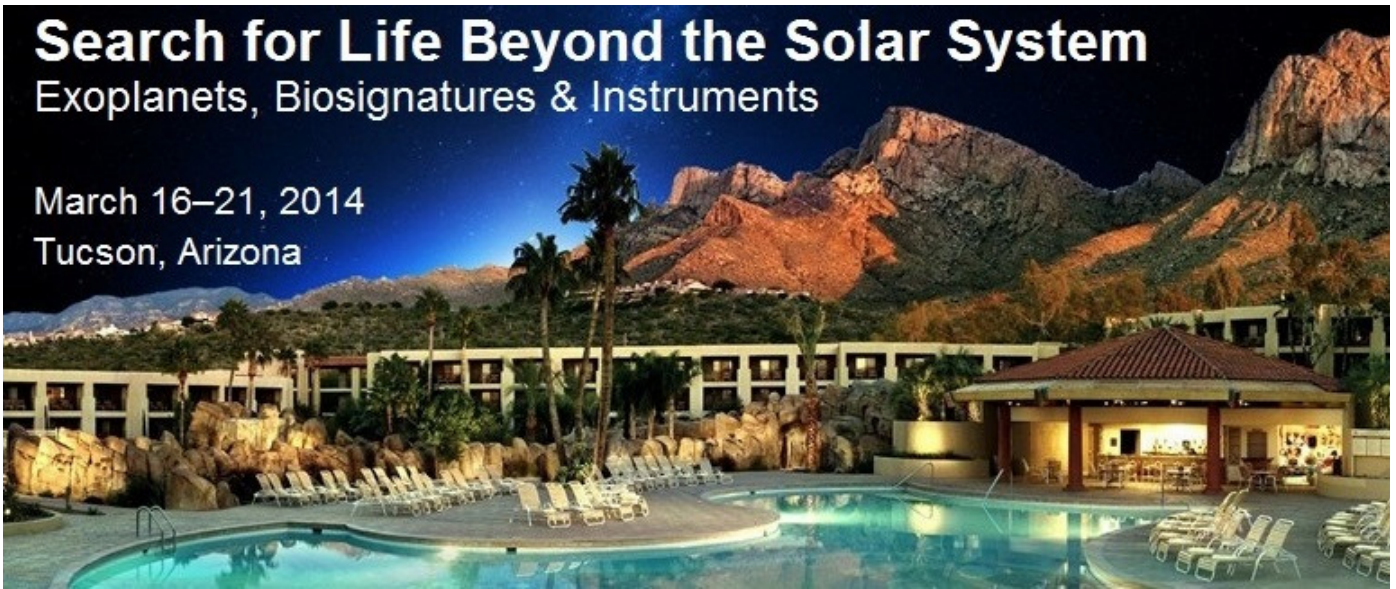


# Search for Life Beyond the Solar System

## Exoplanets, Biosignatures & Instruments

March 16–21, 2014

Tucson, Arizona



- [Home](#)
- [Science Program](#)
- [Venue, Travel, and Local](#)
- [School](#)



Video archive available [here](#)

The recorded virtual coffee is available here: [Thursday](#)

Conference [Photo 1](#) and [Photo 2](#) , [School Photo](#)

### Invited Speakers

John Baross (U. Washington)  
Natalie Batalha (NASA Ames)  
Phil Hinz (UA)  
Markus Kasper (ESO)  
Alain Leger (Orsay)

Steve Benner (FFAME)  
Olivier Guyon (UA, NAOJ)  
Lisa Kaltenegger (MPIA, CfA)  
Peter Lawson (NASA JPL)  
Victoria Meadows (U. Washington)

Heike Rauer (DLR)  
Lynn Rothschild (NASA Ames)  
Ignas Snellen (Leiden)

Sara Seager (MIT)  
Jill Tarter (SETI)

Motivated by the rapidly increasing number of known Earth-sized planets, the increasing range of extreme conditions in which life on Earth can persist, and the progress toward a technology that will ultimately enable the search for life on exoplanets, the [Vatican Observatory](#) and the [Steward Observatory](#) announce a major conference entitled *The Search for Life Beyond the Solar System: Exoplanets, Biosignatures & Instruments*.

**Goal:** The goal of the conference is to bring together the interdisciplinary community required to address this multi-faceted challenge: experts on exoplanet observations, early and extreme life on Earth, atmospheric biosignatures, and planet-finding telescopes.

**Format:** The sessions of the five-day meeting will include invited review and contributed talks, followed by extended discussions. There will be posters, but no parallel sessions. We will limit the number of attendees to 250 to allow interactions between the participants. The conference will include a banquet (Wednesday evening) and an afternoon break (Tuesday) and two evening slots for collaborative team meetings. The Friday morning session will include a coordinated discussion that will provide input for a conference summary.

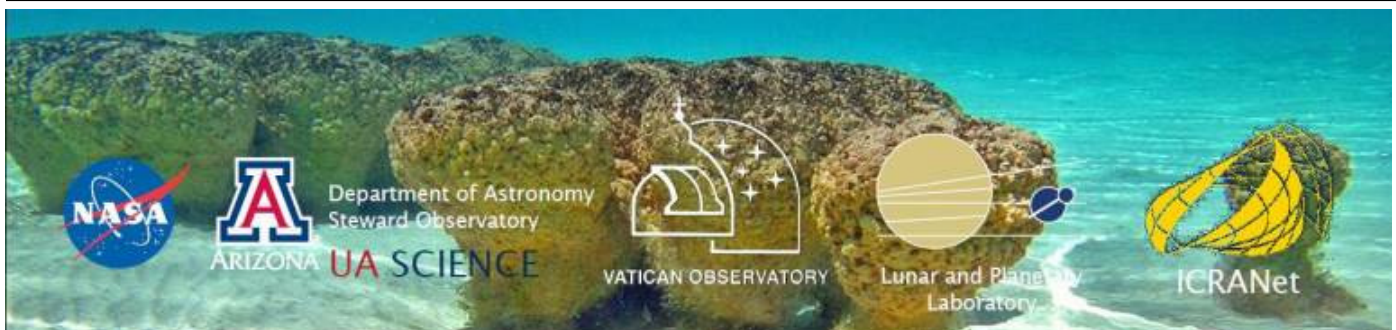
**LIST OF REGISTERED PARTICIPANTS:** The current list of participants who have registered or submitted an abstract is available [here](#).

If you are presenting a poster, please prepare your poster in 36" x 48" or smaller format. Posters will be displayed during the entire week and multiple time slots have been reserved for poster viewing, ensuring visibility for poster presentations.

If you are presenting a talk, please bring your talk in Powerpoint, Keynote, or PDF format. The conference program also includes longer than usual questions and answers sessions, allowing more interactions and discussions between participants.

**Proceedings:** The conference proceedings will be published as a special issue of the International Journal of Astrobiology (Cambridge University Press). Contributions will be available through the NASA ADS system.

**School:** An independently organized 3-day astrobiology school will precede the conference. The school will provide an introduction to graduate students and postdoctoral researchers to the multiple disciplines and concepts the conference builds upon. The school will be held at the University of Arizona's unique Biosphere 2 facility and lectures will be given by some of the invited speakers and University of Arizona faculty. The school, including accommodation and food, will be free for the participants of the EBI2014 conference. The Dean of the Astrobiology School is [Dr Rory Barnes](#) (University of Washington).





## Program - Search for Life Beyond the Solar System 2014

Day	Program
Friday - Sunday (3/14-3/16 )	Pre-Conf. School
Sunday evening 4:30-6:00PM	Welcome Reception at Turquoise I Ballroom
Monday AM	<b>Terrestrial and Extraterrestrial Life: and Rocky Planet Atmospheres and Biosignatures</b>
Monday PM	
Monday Evening	~2h slot open for team meetings
Tuesday AM	<b>Rocky Planet Atmospheres and Biosignatures</b>
Tuesday PM	Excursion / Social Program
Tuesday Evening	Free / Poster session Public Lecture by Jill Tarter
Wednesday AM	<b>Rocky Planet Atmospheres and Biosignatures <i>and</i> Transiting Exoplanets: From State of the Art to the Near Future</b>
Wednesday PM	
Wednesday Evening	Conference Dinner
Thursday AM	<b>Direct Imaging: From State of the Art to the Near Future</b>
Thursday PM	
Thursday Evening	~2h slot open for posters / team meetings
Friday AM	<b>Direct Imaging: From State of the Art to the Near Future (continued)</b>
Friday AM	<b>Panel Discussion</b>
Friday PM	<b>Search for Extraterrestrial Technology</b>
Friday Evening	Informal social program for those who stay for next meeting
Saturday-Tuesday	<a href="#">LBTO Users Meeting</a> at Westward Look [Independently Org.]

## Program - Search for Life Beyond the Solar System 2014

Sunday	
4:30-6:00PM	Opening Reception at Turquoise I Ballroom, Hilton El Conquistador; Registration
Monday - Session I <i>Terrestrial and Extraterrestrial Life</i>	
9:00 - 9:15	Welcome: Buell Jannuzi (Steward Observatory) and José Funes (Vatican Observatory)
9:15-9:45	<b>John Baross</b> The Limits of Earth Life (Invited)
9:45-10:15	<b>Steve Benner</b> Alien Biochemistries and Metabolic Byproducts Leading to Atmospheric Biosignatures (Invited)
10:15-10:35	<b>Yu Komatsu:</b> Toward understanding as photosynthetic biosignatures: light harvesting and energy transfer calculation
10:40-11:00	Coffee Break
11:00-11:30	<b>Lynn Rothschild</b> Synthetic Biology and the Search for Extraterrestrial Life (Invited)
11:30-12:15	<b>Poster Viewing</b>
12:15-1:30	Lunch break
Session II - <i>Habitable Planets and Biosignatures</i>	
1:30-2:00	<b>Victoria Meadows:</b> Factors Affecting the Habitability of Earth-like Planets (Invited)
2:00-2:20	<b>Ilaria Pascucci:</b> An enhanced carbon chemistry in disks around very low-mass stars and brown dwarfs?
2:20-2:40	<b>Evgenya Shkolnik:</b> HAZMAT I: The Evolution of X-ray, Far-UV and Near-UV Emission from Early M Stars
2:40-3:00	<b>John Lee Grenfell:</b> for Earth-like Planets in the HZ of M-Dwarf Stars
3:00-3:20	Coffee Break + Posters
3:20-3:40	<b>Feng Tian:</b> Stability and Oxygen Contents of the Atmospheres of Planets in the HZ of M dwarfs
3:40-4:00	<b>Sarah Rugheimer:</b> Influence of UV activity on the Spectral Fingerprints of Earth-like Planets around M dwarfs
4:00-4:20	<b>Miguel Yamila:</b> Spectral features of Mini-Neptunes and EGP orbiting different stars: exploring the effect of high stellar FUV radiation
4:20-4:40	<b>Nader Haghighipour:</b> Dynamical Evolution and Migration of Circumbinary Planets and Their Habitability
4:40-5:00	<b>William Welsh:</b> Observations of Kepler Habitable Zone Circumbinary Planets
5:00-7:00	<b>Poster Viewing</b>

## Program - Search for Life Beyond the Solar System 2014

Tuesday - Session II <i>Habitable Planets and Biosignatures</i> ; Chair: Lynn Rothschild	
9:00-9:20	<b>Shoji Ueta:</b> Appearance of High-Pressure Water Ice on Ice-Covered Terrestrial Planet
9:20 – 9:40	<b>Eliza Kempton:</b> Lessons from the First Observations of Super-Earth Atmospheres
9:40 – 10:00	<b>Jade Carter-Bond:</b> Terrestrial planet composition: simulation and observation
10:00–10:20	<b>Rory Barnes:</b> A Method to Identify the Boundary Between Rocky and Gaseous Exoplanets from Tidal Theory and Transit Durations
10:20-10:40	Coffee Break + Posters
10:40-11:10	<b>Sara Seager:</b> On The Reliability/ambiguity of Atmospheric Biosignatures and Key Challenges for Biosignature Studies
11:10-11:30	<b>Eduardo Janot Pacheco:</b> A New Paradigm for Habitability in Planetary Systems: the Extremophilic Zone
11:30-11:50	<b>Enric Palle:</b> Modeling the globally-integrated spectral variability of the Archean Earth: The purple planet
11:50–12:10	<b>David Soderblom:</b> The problem of stellar ages
12:10-2:00	Lunch break + Poster viewing
2:00-6:00	<p>Afternoon Excursions</p> <p>A) Biosphere 2</p> <p>B) Mirror Lab, Tree Ring Lab, and UA Campus</p> <p>C) Desert Museum</p> <p>For all three excursions meeting points are at the hotel lobby with buses leaving at 2:00pm and return between 6:00-6:15pm.</p>
6:30 - 7:30	Poster Viewing
7:30-8:30	<p><b>Public Lecture: Jill Tarter</b>, Bernard M. Oliver Chair for the SETI Institute</p> <p><i>The Cosmos &amp; You: A Presentation on Astrobiology and the Future</i></p> <p><i>Why investing in the Search for Intelligent Life Beyond Earth is Important to the Long Term Future of Humanity</i></p> <p>Location: Social Science Bldg, Room 100, University of Arizona</p> <p>Please, see registration desk to arrange transportation</p>

## Program - Search for Life Beyond the Solar System 2014

<b>Wednesday</b> <b>Session II    <i>Habitable Planets and Biosignatures (continued)</i>    Chair: Ilaria Pascucci</b>	
9:00–9:20	<b>Edwin Turner:</b> Direct Imaging Detectability of Tidally Heated ExoMoons (THEM)
9:20–9:40	<b>Shim Sang-Heon:</b> Un-Earth-Like Interiors of Earth-Like Exoplanets
9:40–10:00	<b>Adam Showman:</b> Atmospheric circulation and climate of terrestrial exoplanets and super Earths
10:00–10:20	<b>Gijs Mulders:</b> The Water Content of Exo-earths in the Habitable Zone
10:20-11:00	Coffee Break + Posters
<b>Session III    <i>Transiting Exoplanets: From State of the Art to the Near Future</i></b>	
11:00-11:30	<b>Natalie Batalha:</b> Eta Earth and Insights from Kepler on the Frequency of Earth-sized Planets in the Habitable Zone (Invited)
11:30-11:50	<b>Beatriz González-Merino:</b> Jupiter's transmission spectrum
11:50-12:10	<b>Thomas Barclay:</b> The first Earth-sized habitable zone exoplanets
12:10-1:30	Lunch break
	<b>Chair: Alain Leger</b>
1:30-2:00	<b>Ignas Snellen:</b> Characterizing the Atmospheres of Transiting Planets from the Ground (Invited)
2:00-2:20	<b>Brice-Olivier Demory:</b> Space-based Characterization of super-Earth exoplanets
2:20-2:40	<b>Rene Doyon:</b> Transit Spectroscopy with NIRISS on JWST
2:40-3:00	<b>Wesley Traub:</b> An Estimate of Eta-Earth, From Simulating Kepler Data
3:00-3:20	<b>David Latham:</b> Rocky Planet Results from HARPS-N
3:20-3:40	Coffee Break + Posters
3:40-4:10	<b>Heike Rauer:</b> Observations of Extrasolar Planet Transits: What's Next? (Invited)
4:10-4:30	<b>George Ricker:</b> The Transiting Exoplanet Survey Satellite Mission
4:30-4:50	<b>Daniel Rouan:</b> Could we constrain some major properties of hot Super-Earths with NIRSPEC-JWST spectra?
4:50-5:10	<b>Andreas Quirrenbach:</b> CARMENES: Looking for Blue Planets Orbiting Red Dwarfs
6:00	Drinks Served
6:30	Conference Dinner

## Program - Search for Life Beyond the Solar System 2014

<b>Thursday - Session IV</b> <i>Direct Imaging: From State of the Art to the Near Future; Chair: Peter Lawson</i>	
9:00–9:20	<b>Beth Biller:</b> The Gemini/NICI Planet-Finding Campaign: The Frequency of Planets around Young Moving Group Stars
9:20–9:40	<b>Laird Close:</b> H-alpha as a Probe of Very Low-mass Planets: The GAPplanetS Survey With the MagAO System
9:40–10:00	<b>Jenny Patience:</b> Gemini Planet Imager First Light and Campaign Survey
10:00–10:20	<b>Andy Skemer:</b> LEECH: LBTI Exozodi Exoplanet Common Hunt
10:20–10:40	Coffee Break + Posters
10:40–11:10	<b>Markus Kasper:</b> Capabilities and Expected Results from Next-Generation Adaptive Optics Systems (Invited)
11:10–11:30	<b>Christoph Keller:</b> Towards Polarimetric Exoplanet Imaging with ELTs
11:30–11:50	<b>Klaus Strassmeier:</b> Biosignatures from circular spectropolarimetry: key science for ELTs?
11:50–12:10	<b>William Sparks:</b> Remotely sensing homochirality, a powerful generic biosignature
12:10–1:30	Lunch break
	<b>Chair: Andreas Quirrenbach</b>
1:30-2:00	<b>Phil Hinz:</b> The Challenge of the Exozodiacal Light (Invited)
2:00-2:20	<b>Denis Defrère:</b> The Hunt for Observable Signatures of Terrestrial Planetary Systems (HOSTS)
2:20-2:50	<b>Olivier Guyon:</b> Coronagraphy — From State of the Art to the Near Future (Invited)
2:50-3:10	<b>Charles Beichman:</b> The Near-Infrared Camera on the James Webb Space Telescope: The Next Great Step in Exoplanet Research
3:10-3:30	Coffee Break + Conference Photo
3:30-4:00	<b>Alain Leger:</b> Searching for extrasolar life, the capabilities of affordable missions as a function of eta Earth (Invited)
4:00-4:20	<b>Antoine Crouzier:</b> NEAT: an astrometric space telescope to search for habitable exoplanets in the solar neighborhood
4:20-4:40	<b>Eduardo Bendek:</b> Direct Imaging of Exoplanets around Alpha Centauri and Other Multiple Star Systems
4:40-5:00	<b>Jared Males:</b> Direct Imaging of Extrasolar Giant Planets in the Habitable Zone
5:00-7:00	Poster Viewing / Team meetings

## Program - Search for Life Beyond the Solar System 2014

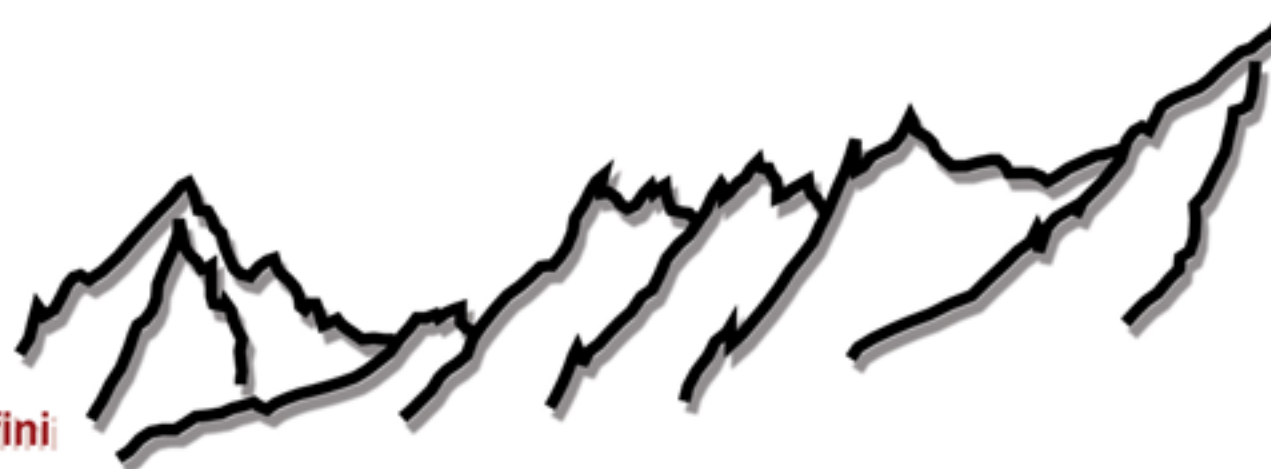
<b>Friday - Sessions IV and V</b> <i>Direct Imaging: From State of the Art to the Near Future</i> <i>Search for Extraterrestrial Technology ; Chair: Daniel Rouan</i>	
9:00 – 9:30	<b>Peter Lawson:</b> High-Contrast Imaging and Interferometry Mission Concepts for The Characterization of Exoplanets (Invited)
9:30 – 9:50	<b>Nick Siegler:</b> Technology Development Towards a Flight Coronagraph
9:50-10:10	<b>Jeff Kuhn:</b> Enabling Technologies for Detecting Life in the Universe: The Colossus Project
10:15-10:45	Coffee Break + Poster Session
10:45-12:00	Panel Discussion
12:00-1:30	Lunch break
	<b>Chair: Travis Barman</b>
1:30 – 2:00	<b>Jill Tarter:</b> SETI: Past, Present, Future (Invited)
2:00 – 2:20	<b>Eric Korpela:</b> SETI Programs at the University of California, Berkeley
2:20 – 2:40	<b>Shauna Sallmen:</b> Indications of Technology in Planetary Transit Light Curves due to Dark-side Illumination
2:40 – 3:00	<b>Ian Morrison:</b> Extending Galactic Habitable Zone Modelling to Include the Emergence of Intelligent Life
3:00-3:20	Coffee Break
3:20-3:50	Closing Remarks



# ÉCOLE DE PHYSIQUE LES HOUCHES

11-16 May 2014

Organizers: Pascal Chardonnet, George Meynet and Remo Ruffini



## IRAP PhD and Erasmus Mundus Workshop Supernovae, Gamma-ray bursts and the induced gravitational collapse

The workshop is promoted by ICRANet within the International Relativistic Astrophysics Ph. D. Program (IRAP Ph D) and the ERASMUS MUNDUS activities. The recent astrophysical data observed by the satellites Swift, Fermi, Agile as well as the observations of the largest telescopes: VLT, Canari Island and KEK in Hawaii give a clear evidence for a new scenario of understanding between Supernovae and the GRBs. The induced gravitational concept initially proposed in 2001 and then in 2006 revisited appear to give a complete explanation of the main observational data. The new concept of cosmic matrix has been recently proposed and will be discussed with special attention to GRBs 970828, 060218, 060614, 060729, 061007, 080319B, 090227B, 090510A, 090618, 091127, 101023, 110709B, 111228A, 130427A, 130925A.

Invited lecturers include: Boer Michel, Della Valle Massimo, Izzo Luca, Meynet George, Muccino Marco, Nomoto Ken'ichi t.b.c., Penacchioni Ana Virginia, Pisani Giovanni Battista, Soderberg Alicia t.b.c., Xang-Yu Wang et al.

Les Houches Physics School is affiliated with Université Joseph Fourier Grenoble I (UJF). The school is a joint interuniversity facility of UJF and Grenoble-INP, and is supported by the UJF, the Centre National de la Recherche Scientifique (CNRS) and the Direction des Sciences de la Matière du Commissariat à l'Energie Atomique (CEA/DSM).

For further information and registration, please visit the websites:

<http://www.icranet.org/>

or contact:

Chardonnet Pascal [chardonnet@lapp.in2p3.fr](mailto:chardonnet@lapp.in2p3.fr)

Ruffini Remo [ruffini@icra.it](mailto:ruffini@icra.it)

or the secretarial staff

Cimini Marzio Maria [marziomaria.cimini@icranet.org](mailto:marziomaria.cimini@icranet.org)

Di Berardino Federica [federica.diberardino@icranet.org](mailto:federica.diberardino@icranet.org)

Ecole de Physique des Houches, Côte des Chavants, F-74310 Les Houches, France. <http://houches.ujf-grenoble.fr>





	Monday	Tuesday	Wednesday	Thursday	Friday
7:45-8:45	Breakfast				
<i>Chairman</i>	<i>Chardonnnet</i>		<i>Bianco</i>	<i>Vakili</i>	<i>Chardonnnet</i>
9:00-9:45	Ruffini	Della Valle	Arguelles	Frontera	Pereira
9:45-10:30	Rueda	Pisani	Rueda	Meynet	Wu
10:30-10:45	Break	Break	Break	Break	Break
10:45-11:30	Fryer	Penacchioni	Gomes de Oliveira	Meynet	Bégué
11:30-12:15	Izzo	Izzo	Enderli	Boer	Chardonnnet
12.30	Lunch				
13.30					
<i>Chairman</i>		<i>Rueda</i>			
15:00-15:45	Fryer	Muccino	Popov	Popov	
15:45-16:30	Warren	Wang Yu	Kovacevic	Dereli / Bardho/ Gregoris	
16:30-16:45	Break	Break	Break	Break	
16:45-17:30	Della Valle	Bianco	Sawant/Maiolino/Khorrami	Sahakyan	
17:30-18:15	Free Discussions	Aksenov	Ludwig/Xue	Strobel / Xue	
19.30	Dinner				





# 1<sup>st</sup> Scientific ICRA Net Meeting in Armenia: Black Holes: the largest energy sources in the Universe June 30 - July 4, 2014 - Yerevan (Armenia)

The Physics of Black Holes dominates some of the most energetic astrophysical phenomena in the Universe. The formation of a Black Hole appears to be related to the emission of a Gamma Ray Burst (GRB), the most energetic transient phenomena in the Universe. The basic mechanism appears to be the creation of electron positron pair plasma occurring by vacuum polarization process around a Kerr-Newman Black Hole by the Heisenberg-Euler-Schwinger mechanism. An effort for reaching such an extreme electromagnetic quantum regime is being currently approached also in MegaJoule Laser Projects in Europe, Russia, USA. In addition a prolonged emission appears to be related to rotating electromagnetic Black Holes in microquasars. The presence of Supermassive Black Holes (SMBHs) of  $10^8 - 10^9$  solar masses appears to be related to active galactic nuclei, Blazars and Quasars. There is the possibility that, unlike the stellar mass Black Holes, which are formed by the gravitational collapse of baryonic matter, the SMBHs can originate from the gravitational collapse of Dark Matter. This meeting will address both observational/experimental and theoretical aspects. From an observational point of view, results obtained from very high energy observatories from the ground such as HESS, MAGIC, AUGER and from next generation instruments will be reviewed. Similarly will be reviewed the observations from Space Observatories in X and Gamma Rays such as Agile, Fermi, Swift, MAXI and NuStar. The complementary observations in Microwave and infrared bands from Planck mission will be presented. Ongoing progress for experimental facilities to look for coincidence with Gravitational waves detectors and Neutrinos detectors will be also reviewed. From a theoretical point of view attention will be given to progress in understanding quantum and classical phenomena related to the physics of Black Holes and to the process of extraction of the Black Hole Energy.

From June 23 to June 27 a graduate school, on the same topics of the meeting, will take place in the mountains close to Yerevan. In addition to the IRAP-PhD students, other graduate students are welcome.

**INTERNATIONAL ORGANIZING COMMITTEE:** **ARMENIA:** Aharonian Felix (co-chair), Avagyan Roland, Chubaryan Edward, Harutyunian Haik (co-chair), Martirosyan Radik (co-chair), Mirzoyan Razmik, Papoyan Aram; **ARGENTINA:** Mirabel Felix, Romero Gustavo; **BRAZIL:** Braga João, Makler Martin, Malheiro Manuel, Novello Mario; **CHINA (BEIJING):** Feng Long Long, Jing Yipeng, Zhang Shuangnan; **CHINA (TAIPEI):** Chen Pisin; **ESTONIA:** Einasto Jaan; **FRANCE:** Chardonnet Pascal; **GERMANY:** Di Piazza Antonino, Hatsagortsyan Karen, Keitel Christoph H., Kleinert Hagen, Kramer Michael, Kunz Jutta, Lämmerzahl Claus, Nicolai Hermann, Perlick Volker; **INDIA:** Chakrabarti Sandip K.; **ISRAEL:** Piran Tsvi; **ITALY:** Belinski Vladimir, Della Valle Massimo, De Angelis Alessandro, Giommi Paolo, Ruffini Remo (chair), Tavani Marco, Vereshchagin Gregory, Vissani Francesco, Xue Shesheng; **NEW ZEALAND:** Kerr Roy; **RUSSIA:** Bisnovatyi-Kogan Gennady, Bykov Andrei, Chechetkin Valery, Khangulyan Dmitry, Sunyaev Rashid, Titarchuk Lev; **SOUTH KOREA:** Kim Sang Pyo, Kim Sung-Won, Lee Hyun Kyu, Lee Hyung Won, Park Myeong-Gu; **SWEDEN:** Ryde Felix, Rosquist Kjell; **USA:** Arnett David, Everitt Francis, Jantzen Robert, Mathews Grant, Mester John, Williams Robert; **VATICAN STATE:** Funes Jose Gabriel, Gionti Gabriele.

**LOCAL ORGANIZING COMMITTEE:** Baghdasaryan Daniel, Ghazaryan Satenik, Harutyunyan Arus, Harutyunyan Gohar, Harutyunian Haik (co-chair), Harutyunyan Vahagn, Nersisyan Henrik, Sahakyan Narek (co-chair), Saharian Aram.



For informations and registration see <http://www.icranet.org/>

photo by Martin Shahbazyan





# 1<sup>st</sup> Scientific ICRANet Meeting in Armenia: Black Holes: the largest Energy sources in the Universe

	<b>Monday 30<sup>th</sup> June</b>	<b>Tuesday 1<sup>st</sup> July</b>	<b>Wednesday 2<sup>nd</sup> July</b>	<b>Thursday 3<sup>th</sup> July</b>	<b>Friday 4<sup>th</sup> July</b>
	The Frontiers	Supernovae and GRBs	Short GRBs and Gravitational waves	Active galactic nuclei	Self gravitating systems
	Chairman: Haik A. <b>Harutyunian</b>	Chairman: Michele <b>Armano</b>	Chairman: Jutta <b>Kunz</b>	Chairman: S. O. <b>Kepler</b>	Chairman: Hyung Won <b>Lee</b>
9:00-9:30	Welcome to National and International Representatives (see enclosure)	Massimo <b>Della Valle</b>	Jorge <b>Rueda</b>	Alexei <b>Aksenov</b>	Claus <b>Laemmerzahl</b>
9:40-10:10		Yu <b>Wang</b>	Yuanbin <b>Wu</b>	Grant <b>Mathews</b>	Paolo <b>Giommi</b>
10:20-10:50	Remo <b>Ruffini</b>	Giovanni <b>Pisani</b>	Kuantay <b>Boshkayev</b>	MacKenzie <b>Warren</b>	Bruno <b>Sversut</b>
11:00-11:30	<i>Coffee Break</i>				
11:30-12:00	Razmik <b>Mirzoyan</b>	Milos <b>Kovacevic</b>	Roberto <b>Gilmozzi</b>	Discussions	Jutta <b>Kunz</b>
12:10-12:40	Alessandro <b>De Angelis</b>	Maxime <b>Enderli</b>	Gregory <b>Vereshchagin</b>	Discussions	Volker <b>Perlick</b>
12:50-13:20	Michele <b>Armano</b>	Elena <b>Zaninoni</b>	Fernanda <b>Gomes de Oliveira</b>	Discussions	Robert <b>Jantzen</b>
13:20-15:00	<i>Lunch</i>				

	Monday	Tuesday	Wednesday	Thursday	Friday
	GRBs	Vacuum polarization from Earth to the Universe	Visit to Garni and Gexhard	Binary White Dwarfs and Neutron Stars	Fundamentals
	Chairman: Pascal <b>Chardonnet</b>	Chairman: Gregory <b>Vereshchagin</b>		Chairman: Roberto <b>Gilmozzi</b>	Chairman: Massimo <b>Della Valle</b>
15:00-15:30	Luca <b>Izzo</b>	Christoph H. <b>Keitel</b>		15:30-15:45 - 15 min. tot. Damien <b>Begue</b> Jin Young <b>Kim</b> Sung Won <b>Kim</b>	Volodia <b>Belinski</b>
15:40-16:10	Carlo Luciano <b>Bianco</b>	She-Sheng <b>Xue</b>		15:45-16:15 S. O. <b>Kepler</b>	Riccardo <b>Belvedere</b>
16:10-16:40	Coffee Break			Coffee Break	
16:40-17:10	Marco <b>Muccino</b>	Antonino <b>Di Piazza</b>		16:45-17:15 Rafael <b>Camargo</b> <b>Rodrigues de Lima</b>	Gabriele <b>Gionti</b>
17:20-17:50	Irene <b>Arkhangelskaja</b>	Eckhard <b>Strobel</b>		17:15-17:45 Jaziel <b>Goulart</b> <b>Coelho</b>	Jonas Pedro <b>Pereira</b>
18:00-18:30	Transfer to Cognac Factory for the Welcome Cocktail	Karen Z. <b>Hatsagortsyan</b>  18:30-18:45 Hendrik <b>Ludwig</b>		17:45-18:15 <b>Atamurotov</b> Farruh <b>Bittencourt</b> Eduardo <b>Canfora</b> Fabrizio <b>Giacomini</b> Alex	<b>Kohandel</b> Mahsa <b>Sadeghi</b> Jafar <b>Stepanian</b> Arman
				Meeting with H.E. Mr. Serzh Sargsyan (President of Armenia) T.B.C. His Holiness Karekin II (Catholikos) T.B.C. H.E. Monseigneur Marek Solczynski (Apostolic Nuncio)	
				19:30 Banquet	





# International Center for Relativistic Astrophysics Network

[HOME PAGE](#) [ORGANIZATION](#) [MEETINGS](#) [RESEARCH](#) [IRAP Ph.D.](#) [LINKS](#) [CONTACT US](#) [SEARCH IN THE SITE](#)

## THIRD BEGO RENCONTRES - SEPTEMBER 2014

[ Back ]



### ORGANIZATION

[ICRANet Seats](#)  
[Members](#)  
[Universities](#)  
[Director and Staff](#)  
[Personal Pages](#)

### MEETINGS

[Upcoming Meetings](#)  
[IYA 2009 Meetings](#)  
[Marcel Grossmann](#)  
[Galileo - Xu Guangqi](#)  
[William Fairbank](#)  
[Italian-Korean](#)  
[Italian-Sino Meeting](#)  
[ICRANet Workshops](#)  
[Stueckelberg Meeting](#)  
[C. Lattes Meeting](#)  
[Sobral Meetings](#)  
[Bego Rencontre](#)  
[Urca Meetings](#)  
[Zeldovich Meetings](#)  
[Meetings in Armenia](#)  
[Other Meetings](#)  
[Erasmus Mundus Schools](#)  
[Weekly Seminars](#)  
[Yearly Scientific Meeting](#)

### RESEARCH

[Research Groups](#)  
[Visiting Scientists](#)

### PUBLICATIONS

[Books](#)  
[Proceedings](#)  
[Articles Database](#)

**Visitors:** 3672780

We have 3 guests online

## Third Bego Rencontres IRAP Ph.D. Erasmus Mundus school September 8<sup>th</sup>-19<sup>th</sup>, 2014



**Program** **Location and Transports** **Accommodation**

### **Directors:**

Prof. Remo Ruffini - Prof. Pascal Chardonnet

### **Faculty:**

Giovanni Amelino-Camelia, Ulisses Barres de Almeida, Elia Stefano Battistelli,  
 Vladimir Belinski, Carlo Luciano Bianco, Donato Bini, Sandip Kumar Chakrabarti,  
 Pascal Chardonnet, Christian Cherubini, Thibault Damour, Jann Einasto,  
 Sergio Frasca, Filippo Frontera, Jean-Marc Gambaudo, Paolo Giommi,  
 Yipeng Jing, Hagen Kleinert, Jutta Kunz-Drolshagen, Claus Lämmerzahl,  
 Olivier Legrand, Francois Mignard, Hermann Nicolai, Kjell Rosquist,  
 Jorge Rueda, Remo Ruffini, Felix Ryde, Farrokh Vakili,  
 Gregory Vereshchagin, She Sheng Xue, Shuangnan Zhang

### **Secretariat IRAP PhD:**

ICRANet staff - [Emmanuel Losero](#)

For suggestions&comments write to the [Webmaster](#)



## Foglio1

	Monday 8	Tuesday 9	Wednesday 10	Thursday 11	Friday 12
9.00-10.00	Welcome addresses	Lammerzahl	Dessart	Zen	Ruffini
10.00-11.00	Muccino	Lammerzahl	Dessart	Rueda	Morbidelli
11.00-11.30	<i>Coffee break</i>				
11.30-12.30	Pisani	Muccino	Morbidelli	Wu	Xue
12.30-14.30	<i>Lunch</i>				
14.30-15.30	Dereli	Enderli	Rueda	Cipolletta	Kleinert
15.30-16.30		Becerra / Rueda (?)	Caceres	Camargo	Wu
16.30-17.00	<i>Coffee break</i>				
17.00-18.00			Caceres	Gomes	Strobel
18.00-19.00					Ludwig

	Monday 15	Tuesday 16	Wednesday 17	Thursday 18	Friday 19
9.00-10.00	Carvalho/Pereira Lobo	Perlick	Frontera	Frontera	Amelino Camelia
10.00-11.00	Ahlen	Izzo	Amati	Benoist	Amelino Camelia
11.00-11.30	<i>Coffee break (Wed. 11:00-11:15)</i>				
11.30-12.30	Kovacevic	Izzo	11:15-12:15 Orlandini	Benoist	
12.30-14.30	<i>Lunch (Wed. 12:15-13:30)</i>				
14.30-15.30	Rakshit		13:30-14:30 Amati	Lagadec	
15.30-16.30	Yyani		14:30-15:30 Orlandini	Lagadec	
16.30-17.00	<i>Coffee break (Wed. 15:30-16:00)</i>				
17.00-18.00			16:00-17:00 Calderone	Izzo	
			17:00-18:00 Rosati		