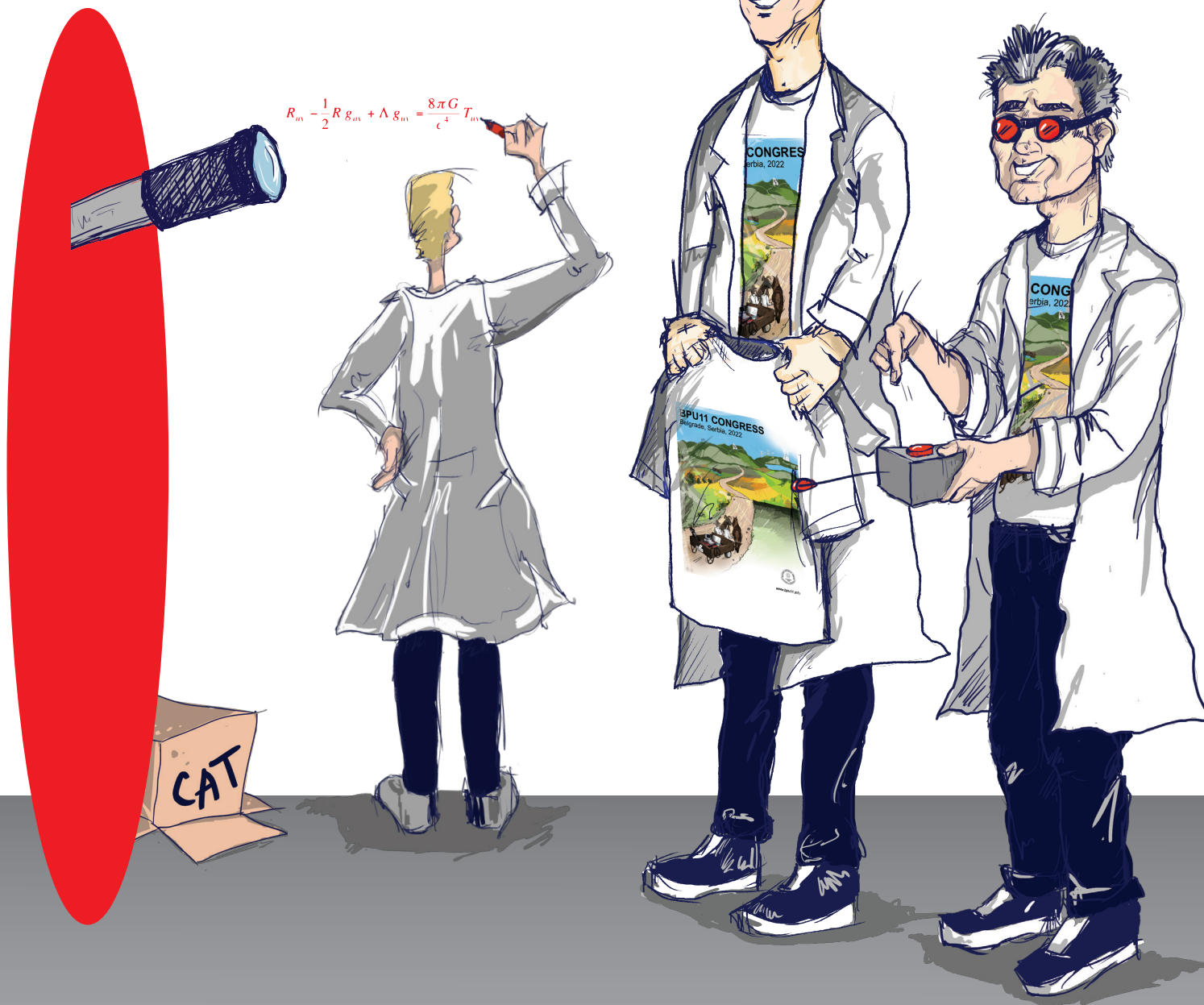


The BPU11 Congress
28. August – 1. September 2022
Belgrade, Serbia



PROGRAM BOOK





SERBIAN ACADEMY OF SCIENCES AND ARTS - SASA

Main Hall, Hall 1, Hall 2, Hall 3, Restaurant

MATHEMATICAL INSTITUTE OF SERBIAN ACADEMY OF SCIENCES AND ARTS, NATIONAL INSTITUTE OF THE REPUBLIC OF SERBIA - MI SASA

Hall 301F, SASA Audiovisual Archive (I Floor)

FACULTY OF PHYSICS

Hall 661, Hall 664, III and IV Floor

UNIVERSITY OF BELGRADE

Main Hall

The Balkan Physical Union (BPU), a number of institutions in Serbia and the European Physical Society are pleased to welcome you to the 11th International Conference of the Balkan Physical Union – BPU11 Congress.

The scientific program of the Congress is comprised out of 13 plenary lectures, 15 different scientific sections, the special session "Frontiers" with 22 invited talks in total, 5 round tables, 2 workshops for teachers, numerous poster sessions, social events and much more ... with about 500 registered participants so far.

The BPU Conferences are a series of triennial general physics conference organized under the auspices of the Balkan Physical Union (BPU). The first conference took place in Thessaloniki, Greece in 1991. The BPU11 Congress aims to bring together leading scientists, researchers, and research scholars in order to provide them with the opportunity to exchange and share their experiences and research results on all aspects of general physics.

Members of BPU are the National Physical Societies of Albania, Bulgaria, Cyprus, Greece, Montenegro, Moldova, North Macedonia, Romania, Serbia and Turkey.

PLENARY LECTURES

Paris Sphicas, “HEP: current perspectives and future challenges”

29.08.2022 | SASA Main Hall | 10:45-11:30

Vladan Vuletić, “Quantum Simulation and Computation with Neutral Atoms”

29.08.2022 | SASA Main Hall | 11:30-12:15

Ion Tiginyanu, “Nature-Inspired Novel Nanomaterials for Multifunctional Applications”

29.08.2022 | SASA Main Hall | 12:15-13:00

Christof Wetterich, “Quantum gravity predictions for particle physics and cosmology”

30.08.2022 | SASA Main Hall | 09:00-09:45

Dejan Milošević, “Quantum-Orbit Theory in Strong-Laser-Field Physics”

30.08.2022 | SASA Main Hall | 09:45-10:30

Borivoje Dakić, "Verification of Quantum Technologies"

30.08.2022 | SASA Main Hall | 11:00-11:45

Karl Grandin, “The Nobel Prizes awarded to Marie Curie and the one not awarded to Lise Meitner”

30.08.2022 | SASA Main Hall | 11:45-12:30

Vladana Vukojević, “Quantitative Scanning-Free Confocal Microscopy with Single-Molecule Sensitivity and Fluorescence Lifetime Imaging for The Study of Fast Dynamic Processes in Live Cells”

31.08.2022 | SASA Main Hall | 09:00 – 09:45

Monica Magureanu, “Promising Research Results On A Few Potential Applications of Non-Thermal Plasma”

31.08.2022 | SASA Main Hall | 09:45-10:30

Luc Berge, “THz Waves Generated by Laser-Plasma Interactions”

01.09.2022 | SASA Main Hall | 09:00-09:45

Panos Argyrakis, “Structures of Networks and Application to Models of Disease Spreading”

01.09.2022 | SASA Main Hall | 09:45-10:30

Philippe Jetzer, "LISA: A gravitational wave observatory in space"

01.09.2022 | University of Belgrade, Main Hall | 17:30-18:15

Jasmina Vujić, “Nuclear Power in the XXI Century”

01.09.2022 | University of Belgrade, Main Hall | 18:15 – 19:00

SCIENTIFIC SECTIONS AND INVITED LECTURERS

Scientific sections

- S1. Nuclear Physics and Nuclear Energy**
- S2. Astronomy and Astrophysics**
- S3. Gravitation and Cosmology**
- S4. Atomic and Molecular Physics**
- S5. High Energy Physics (Particles and Fields)**
- S6. Condensed Matter Physics and Statistical Physics**
- S7. Optics and Photonics**
- S8. Plasma and Gas-Discharge Physics**
- S9. Theoretical, Mathematical and Computational Physics**
- S10. Meteorology and Geophysics**
- S11. Environmental Physics – Alternative Sources of Energy**
- S12. Physics of Socioeconomic Systems and Applied Physics**
- S13. Biophysics and Medical Physics**
- S14. Physics Education, History and Philosophy of Physics**
- S15. Metrology and Instrumentation**

Invited lecturers

- S11. Vassilis Amiridis**
(Athens, Greece)
- S2. Bojan Arbutina**
(Belgrade, Serbia)
- S14. Lambe Barandovski**
(Skopje, North Macedonia)
- S3. Jose Manuel Carmona**
(Zaragoza, Spain)
- S6. Cosmin Farcău**
(Cluj-Napoca, Romania)
- S5. Vladimir Gligorov**
(Paris, France)
- S3. Dragan Huterer**
(Ann Arbor, USA)
- S1. Dejan Joković**
(Belgrade, Serbia)
- S2. Marko Krco**
(Beijing, China)
- S4. Predrag Krstić**
(Stony Brook, USA)
- S7. Jose Ordonez**
(Tokyo, Japan)
- S15. Dejan Pantelic**
(Belgrade, Serbia)
- S13. Alexander Petrov**
(Sofia, Bulgaria)
- S10. Stavros Solomos**
(Athens, Greece)
- S6. Đorđe Spasojević**
(Belgrade, Serbia)
- S12. Bosiljka Tadić**
(Ljubljana, Slovenia)
- S5. Emmanuel Tsessmelis**
(Geneva, Switzerland)
- S4. Nikolay Vitanov**
(Sofia, Bulgaria)
- S6. Jakša Vučičević**
(Belgrade, Serbia)
- S9. Dušan Zorica**
(Novi Sad, Serbia)

Monday 29. August 2022

	SASA Main Hall	SASA Hall 1	SASA Hall 2	SASA Hall 3
09:15 - 10:15	Opening			
10:15 - 10:45				
10:45 – 11:00	Plenary Talk 1 Paris Sphicas			
11:00 – 12:15	Plenary Talk 2 Vladan Vuletić			
12:15 – 13:00	Plenary Talk 3 Ion Tiginyanu			
13:00 – 14:30				
14:30 – 16:00	Round Table 1 HEP – Roadmaps to the future		Section 6	Section 7
16:00 – 16:30				
16:30 – 18:00	Section 5	Section 8	Section 6	Round Table 2 Integration – Widening Participation
18:00 – 19:00				

The BPU11 Congress

PROGRAMME DAY 1

SASA Restaurant	SASA Audiovisual Archive	MI SASA Hall 301F	Faculty of Physics Hall 661	Faculty of Physics Hall 664	Faculty of Physics III and IV Floor
Coffee Break					
Lunch time					
		Section 9	Section 14	Section 15	
Coffee break time					
		Section 12	Section 14	Section 11	
Poster session Sections 2, 7, 8, 9, 12					Poster session Sections 10, 11, 14, 15

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Tuesday 30. August 2022

	SASA Main Hall	SASA Hall 1	SASA Hall 2	SASA Hall 3
09:00 – 09:45	Plenary Talk 4 Christof Wetterich			
09:45 – 10:30	Plenary Talk 5 Dejan Milošević			
10:30 – 11:00				
11:00 – 11:45	Plenary Talk 6 Borivoje Dakić			
11:45 – 12:30	Plenary Talk 7 Karl Grandin			
12:30 – 14:00				
14:00 – 16:00	Section 6		Round Table 3 Young Minds Career in Physics	Teachers Workshop
16:00 – 16:30				
16:30 – 18:00	Section 6		Round Table 4 Young Minds Quantum and New Technologies	Teachers Workshop
18:00 – 19:00				

PROGRAMME DAY 2

SASA Restaurant	SASA Audiovisual Archive	MI SASA Hall 301F	Faculty of Physics Hall 661	Faculty of Physics Hall 664	Faculty of Physics III and IV Floor
Coffee Break					
Lunch time					
	Section 1	Section 2	Section 5	Section 10	
Coffee break time					
	Section 1	Section 2	Section 3	Section 10	
Poster session Sections 1, 4, 6					Poster session Sections 3, 5, 13

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	SASA Main Hall	SASA Hall 1	SASA Hall 2	SASA Hall 3	SANU Restaurant
09:00 – 09:45	Plenary Talk 8 Vladana Vukojević				
09:45 – 10:30	Plenary Talk 9 Monica Magureanu				
10:30 – 11:00	Coffee Break				
11:00 – 12:30	Round Tables 5 Models of Studying Physics in European Universities – Specificities in Balkan Countries			Poster session Online posters All sections	
12:30 – 14:00	Lunch time				
14:00 – ...	Social Events				

SESSION FRONTIERS

Sep 1, 2022, 11:00 AM

Serbian Academy of Sciences and Arts – SASA

Chairperson: Branko Dragovich

ROUND TABLES

RT1 – HEP – Roadmaps to the future

Aug 29, 2022, 2:30 PM

Serbian Academy of Sciences and Arts – SASA, Main Hall

Moderator: Predrag Milenovic

RT2 – Integration – Widening Participation

Aug 29, 2022, 4:30 PM

Serbian Academy of Sciences and Arts – SASA, Main Hall

Moderators: Enrique Sanchez-Bautista and Radu Constantinescu

RT3 – YM Roundtable – Career in Physics

Aug 30, 2022, 2:00 PM

Serbian Academy of Sciences and Arts – SASA, Hall 2

Moderators: Araceli Venegas-Gomez and Milena Simić

RT4 – YM Roundtable – Quantum and New Technologies

Aug 30, 2022, 4:30 PM

Serbian Academy of Sciences and Arts – SASA, Hall 2

Moderator: Enrique Sanchez-Bautista

RT5 – Models of Studying Physics in European Universities – Specificities in Balkan Countries

Aug 31, 2022, 11:00 AM

Serbian Academy of Sciences and Arts – SASA, Main Hall

Moderators: Madalin Bunoiu, Radu Constantinescu and Zorica Popovic

Teachers` workshops

Part 1 – Perimeter Institute Program

Aug 30, 2022, 2:00 PM

Part 2 – Manolis Chaniotakis

Aug 30, 2022, 2:00 PM

Serbian Academy of Sciences and Arts – SASA, Hall 3

Part 2 – Manolis Chaniotakis

Aug 30, 2022, 4:30 PM

Serbian Academy of Sciences and Arts – SASA, Hall 3

SOCIAL EVENTS

Coctail

Aug 28, 2022, 7:00 PM

Hotel Palace, Belgrade

Conference Dinner

Aug 31, 2022, 8:15 PM

Raft restaurant “Kruna”, Savski kej.

The cruise ship

Aug 31, 2022, 6:00 PM

More details on BPU11 site

Thursday 01. September 2022

	SASA Main Hall	SASA Hall 1	SASA Hall 2	SASA Hall 3
09:00 – 09:45	Plenary Talk 10 Luc Berge			
09:45 – 10:30	Plenary Talk 11 Panos Argyrakis			
10:30 – 11:00				
11:00 – 11:30	Frontiers 1 Ignatios Antoniadis		Books Presentation	Section 4
11:30 – 12:00	Frontiers 2 Milivoj Belić		Books Presentation	Section 4
12:00 – 12:30	Frontiers 3 Emilian Dudas		Books Presentation	Section 4
12:30 – 13:00	Frontiers 4 Predrag Miranovic		Books Presentation	Section 4
13:00 – 14:30	Lunch time			
14:00 – 16:00			Section 3	
16:00 – 16:30				
16:30 – 17:00				
17:00 – 17:30	University of Belgrade, Main Hall Awards			
17:30 – 18:15	Plenary Talk 12 Philippe Jetzer			
18:15 – 19:00	Plenary Talk 13 Jasmina Vujić			

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PROGRAMME DAY 4

SASA Restaurant	SASA Audiovisual Archive	MI SASA Hall 301F	Faculty of Physics Hall 661	Faculty of Physics Hall 664	Faculty of Physics III and IV Floor
Coffee Break					
	Section 13				
	Section 13				
	Section 13				
	Section 13				
	Section 13				
Coffee break (University of Belgrade, yard)					

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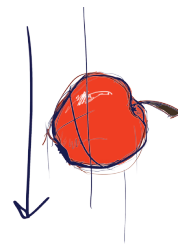
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$$F = G \frac{m_1 m_2}{d^2}$$

