SYMPOSIUM ON LATEST ACHIEVEMENTS IN PHYSICS ON THE OCCASION OF THE 20TH ANNIVERSARY OF THE "PROF. Dr MARKO V. JARIC" FOUNDATION (Symposium MJ 2018)

PROGRAMME

FRIDAY, 23 MARCH 2018.

Main Hall of the Serbian Academy of Scinces and Arts (SASA) Knez Mihailova 35, II floor

09:30 – 10:00 Opening Vladimir Kostić, President of the SASA Petar Adžić, Governor of the Foundation

Chairman: Petar Adžić

- 10:05–10:50 John Ellis Kings College London and CERN *Title of the talk: Particle physics, present and future*
- 10:55–11:25 Coffee break
- 11:30–13:00 Ceremony of the "Marko Jarić" prize Award for 2017 Opening: Milivoj Belić, Deputy president of Governing Board
 Report of the Award Committe: Zoran Radović The prize award to the winner
 Lecture of the winner

2

FRIDAY, 23 MARCH 2018.

Faculty of Physics of University of Belgrade Studentski trg 12–16, Block C, III floor

13:20-15:00 C O C K T A I L

(Student's library of Faculty of Physics) Faculty of Physics of University of Belgrade Studentski trg 12 – 16, Blok C, III floor Physics amphitheatre – Hall 661

Chairman: Jovo Jarić

15:00-15:30 Miodrag Kulić

Institute for Theoretical Physics, Goethe University, 60 438 Frankfurt am Main, Germany *Title of the talk: High Temperature Superconductors – The Current State*

15:35-16:05 Zoran Lj. Petrović

Institute of Physics, University of Belgrade Title of the talk: **Describing the non-equilibrium processes**, from plasma physics to fundamental principles and back to practical applications

16:10 -16:40 Milan Damnjanović

NanoLab, Faculty of Physics, University of Belgrade and SASA

Title of the talk: Electron-phonon coupling anomalies in layers

16:45–17:15 Bosiljka Tadić

Department of Theoretical Physics, Jozef Stefan Institute, Ljubljana Title of the talk: Hyperbolic Geometry of Networks Emerging from Online Social Endeavors

18:00–21:00 SYMPOSIUM DINNER Konoba AKUSTIK kafana sa dušom Cara Dušana 13, Dorćol, Beograd

SATURDAY, 24 MARCH 2018.

Faculty of Physics of University of Belgrade Studentski trg 12 – 16, Block C, III floor Physics amphitheatre – Hall 661

Chairman: Горан Попарић

10:00-10:30 Zoran Radović

Faculty of Physics, University of Belgrade and SASA *Title of the talk:* **Interplay of superconductivity and** *magnetism*

10:35-11:05 Vlatko Vedral

University of Oxford Title of the talk: Which roads to quantum gravity can explain spatial entanglement of massive particle?

11:10-11:40 Vladan Vuletić

Lester Wolfe, Massachusetts Institute of Technology *Title of the talk:* **Atomic clock below the standard quantum limit**

11:45-12:15 Časlav Brukner

Institute for Quantum Optics and Quantum Information, Vienna & Faculty of Physics, University of Vienna *Title of the talk:* **Quantum superpositions of causal orders**

12:20-12:50 Coffee break

Chairman: Duško Borka

12:55–13:25 Jelena Vučković

Stanford University, Stanford, CA, USA *Title of the talk:* **Quantum nanophotonics: from inverse design to implementations**

13:30-14:00 Čedomir Petrović

Brookhaven National Laboratory *Title of the talk:* **Thermoelectric Power Factor and Electronic Correlations in FeSb2**

14:05–14:35 Dejan Stojković

State University of New York at Buffalo Title of the talk: **Quantum aspects of gravitational collapse: non-locality and non-singularity**

14:40-15:10 Leonardo Golubović

Department of Physics and Astronomy, West Virginia University

Title of the talk: Physics of Rotating Space Elevators

15:15 Closing