

# ERC GR 2018 Program

## Monday 15 October 2018

- 8.00 Bus departs from City Center to FORTH (Meeting Point: Meeting Point: El. Venizelos Statue, near Eleftheria square, Heraklion)
- 9.00-9.10 Welcome Address by the Organizers (**Poirazi, Rakitzis, Sariyannis**)
- 9.10-9.30 Opening by **Jean Pierre Bourguignon**, ERC President
- 9.30-9.40 Welcome Address by **Costas Fotakis**,  
Greek Alternate Minister for Research and Innovation
- 9.40-10.00 Welcome Address by **Nektarios Tavernarakis**, FORTH President
- 10.00-10.15 Friends of the ERC Initiative, **Axel Cleeremans**, FRS-FNRS
- 10.15-10.45 **Barbara Romanowicz**, Univ. of California, Berkeley and ERC Council member  
*"Seismic imaging of the earth's deep mantle in the era of high-performance computing"*
- 10.45-11.15 **Coffee Break**

## Session 1

- 11.15-11.35 **George Garinis**, University of Crete and IMBB-FORTH  
*"DNA damage and Innate Immune Responses in Development and Disease"*  
ERC CoG: DeFiNER, Nucleotide Excision Repair: Decoding its Functional Role in Mammals
- 11.35-11.55 **Eleni Chatzi**, ETH Zurich  
*"Data in Service of Infrastructure"*  
ERC StG: WINDMIL, Smart Monitoring, Inspection and Life-Cycle Assessment of Wind Turbines
- 11.55-12.15 **Spyridon Pandis**, ICE-HT-FORTH  
*"Organic atmospheric nanoparticles, air quality and climate change"*  
ERC AdG: ATMOPACS, Atmospheric Organic Particulate Matter, Air Quality and Climate Change Studies
- 12.15-12.35 **Vassiliki Nikoletopoulou**, IMBB-FORTH  
*"Autophagy at the synapse"*  
ERC StG: NEUROPHAGY, THE ROLE OF AUTOPHAGY IN SYNAPTIC PLASTICITY

12.35-12.55 **Panagiotis Merkouris**, University of Groningen-Department of Transboundary Legal Studies  
*"The Rules of Interpretation of Customary International Law"*  
ERC StG: TRICI-Law, The Rules of Interpretation of Customary International Law

13.00-14.00 **Lunch break (for registered participants)**

14.00-16.00 Round table discussion: **"Brainstorming ideas for justification of ERC budget to politicians & general public, improving ERC Grants, thematic categories, panel membership, management, reporting etc."**

**Panelists:** **Grantees:** Prof. Ioannis Dafalias, UC Davis/NTUA (moderator), Prof. Markos Papageorgiou, TUC, Prof. Maria Rentetzi, Berlin.  
**ERC Council:** Prof. Michael KRAMER, Prof. Janet THORNTON  
**ERCEA:** Pablo AMOR, Theodore PAPAZOGLU

16.00-16:30 **Coffee Break**

## **Session 2**

16.30-16.50 **Dimos Dimarogonas**, KTH Royal Institute of Technology  
*"Distributed hybrid control of multi-robot systems under spatiotemporal specifications"*  
ERC StG: BUCOPHSYS, Bottom-Up Hybrid Control and Planning Synthesis with Application to Multi-Robot Multi-Human Coordination

16.50-17.10 **Thanos Nenes**, ICE-HT -FORTH  
*"The underappreciated impacts of biomass burning"*  
ERC CoG: PyroTRACH, PYROgenic TRAnformations Affecting Climate and Health.

17.10-17.30 **Markos Papageorgiou**, Technical University of Crete  
*"Traffic Management for the 21st Century"*  
ERC AdG: TRAMAN21, Traffic Management for the 21st Century

17.30-17.50 **Katerina Douka**, Max Planck Institute for the Science of Human History  
*"Biomolecular methods and their application in discovering archaeological human fossil remains"*  
ERC StG: FINDER, Fossil fingerprinting and identification of new Denisovan fossils from Pleistocene Asia

17.50-18.10 **Ilias Kiritsis**, University of Crete and CNRS  
*"Gravity, Holography and the Standard Model"*  
ERC AdG: SM-GRAV, Gravity, Holography and the Standard Model

18.10-18.30 **Ioannis Talianidis**, IMBB-FORTH  
*"Epigenetic mechanisms regulating liver development, metabolism and liver cancer."*

ERC AdG: **SET-NET**, Enzymatic and genomic targets of histone modifying enzymes and their role in liver metabolism and hepatocarcinogenesis

18:30- **Cheese and Wine / Dinner with ERC Council members (for registered participants)**

22.00 **Bus departs for City Center (Meeting Point: FORTH Main Entrance)**

## Tuesday 16 October 2018

8.00 **Bus departs from City Center to FORTH (Meeting Point: Meeting Point: El. Venizelos Statue, near Eleftheria square, Heraklion)**

### Session 3

- 9.00-9.20 **Ioannis Tsamardinis**, CSD- University of Crete and IACM-FORTH  
*"Causal discovery from biological data: the good and the bad"*  
ERC CoG: CAUSALPATH, Next Generation Causal Analysis: Inspired by the Induction of Biological Pathways from Cytometry Data
- 9.20-9.40 **Antigone Dima**, BSRC Alexander Fleming  
*"Exploring the molecular impact of dietary intake: a project overview"*  
ERC StG: FastBio, A genomics and systems biology approach to explore the molecular signature and functional consequences of long-term, structured fasting in humans
- 9.40-10.00 **Peter Rakitzis**, IESL-FORTH and Department of Physics, University of Crete  
*"From Chiral-Cavity Polarimetry, to Polarized Nuclear Fusion"*  
ERC StG: TRICEPS, Time-resolved Ring-Cavity-Enhanced Polarization Spectroscopy: Breakthroughs in measurements of a) Atomic Parity Violation, b) Protein conformation and biosensing, and c) surface and thin film dynamics
- 10.00-10.20 **Constantinos Demetriades**, MPI-AGE, Cologne  
*"Nutrient sensing and cell growth control in health and disease"*  
ERC StG: noRAG-TOR, Rag-independent regulation of mTOR by Amino Acids
- 10.20-10.40 **Georgios Kollias**, BSRC Alexander Fleming  
*"Mesenchymal causalities in chronic inflammation and cancer"*  
ERC AdG: MCs-inTEST, Mesenchymal Cells of the Lamina Propria in Intestinal Epithelial and Immunological Homeostasis
- 10.40-11.00 **Marinos Sariyannis**, IMS-FORTH  
*"Exploring Magic, the Marvellous, and the Strange in Ottoman Mentalities"*  
ERC CoG: GHOST, Geographies and Histories of the Ottoman Supernatural Tradition: Exploring Magic, the Marvellous, and the Strange in Ottoman Mentalities

11:00-11:40 **Coffee Break**

#### **Session 4**

- 11.40-12.00 **Costas Fotakis**, Greek Alternate Minister for Research and Innovation  
«Χτίζοντας την Οικονομία της Γνώσης ως αντίδοτο στην κρίση»  
“Building the Knowledge Economy as an antidote to crisis”
- 12.00-12.20 **Panayiota Poirazi**, IMBB-FORTH  
“*Modelling dendritic computations and their role in memory*”  
ERC STG: dEMORY, Dissecting the Role of Dendrites in Memory
- 12.20-12.40 **Georgios Vassilikogiannakis**, Department of Chemistry, UOC  
“*Continuous flow biphasic reactions in microdroplets: Doing chemistry in a cloud.*”  
ERC CoG: SINOXYGEN, Advancing the Green Chemistry of Singlet Oxygen and Applying it to Synthetic Challenges
- 12.40-13.00 **Apostolos Delis**, IMS-FORTH  
“*Seafaring Lives at Work: Questions and objectives of a challenging research in Mediterranean History*”  
ERC StG: SeaLiT, Seafaring Lives in Transition, Mediterranean Maritime Labour and Shipping, 1850s-1920s

13.00-14.00 **Lunch break (for registered participants)**

#### **Session 5**

- 14.00-14.20 **Stelios Choulis**, MMSE, MEPRU, Cyprus University of Technology  
“*Device Engineering Concepts For High Performance Perovskite Photovoltaics*”  
ERC CoG: Sol-Pro, Solution Processed Next Generation Photovoltaics
- 14.20-14.40 **Athanasios Dimoulas**, INN, NCSR Demokritos  
“*Epitaxial 2D Topological Semimetals*”  
ERC AdG: SMARTGATE, Smart gates for the green transistor/Scalable graphene-gated transistors
- 14.40-15.00 **Petros Ligoxygakis**, Department of Biochemistry, University of Oxford  
“*Drosophila as a model to study the interaction of difficult Diptera and their trypanosomatid parasites*”  
ERC StG: Droso-parasite, Drosophila as a model for trypanosomatid-insect interaction
- 15.00-15.20 **Effie Fokas**, Hellenic Foundation for European and Foreign Policy (ELIAMEP)  
“*Grassroots level impact of the European Court of Human Rights: a case study regarding religion-related case law*”

ERC StG: GRASSROOTSMOBILIZE, Directions in Religious Pluralism in Europe: Examining Grassroots Mobilisations in Europe in the Shadow of European Court of Human Rights Religious Freedom Jurisprudence

15.20-15.40 **Ntziachristos Vasilis**, Technical University of Munich and Helmholtz Zentrum Muenchen  
*"Bioengineering: Are we doing enough for translating knowledge to medicine or we just talk about it"*

ERC AdG: PREMSOT, Precision Multi-Spectral Optoacoustic Tomography for Discovery Diagnosis and Intervention

15.40-16.10 **Coffee break**

16.10-16.30 **Ioannis Dafalias**, UC Davis and National Technical University of Athens, Institute of Thermomechanics (IT) of Czech Academy of Sciences  
*"Challenging a Paradigm"*

ERC AdG: SOMEF, Critical State Soil Mechanics Revisited: Fabric Effects

16.30-16.50 **Georgios Sotiriou**, DMTCB, Karolinska Institutet  
*"Flame nanoengineering for biomedicine"*

ERC StG: PROMETHEUS, Flame nanoengineering for antibacterial medical devices

16.50-17.10 **Alexandros Kiouпкиolis**, SPS, Aristotle University of Thessaloniki  
*"Heteropolitics Refiguring the Common and the Political"*

ERC CoG: HETEROPOLITICS, Refiguring the Common and the Political

17.10-19.00 Break in tables based on interests for free format discussion

19:00- **Dinner at FORTH (for registered participants)**

21.30 **Bus departs for City Center (Meeting Point: FORTH Main Entrance)**

## **Wednesday 17 October 2018**

8.00 **Bus departs from City Center to FORTH (Meeting Point: Meeting Point: El. Venizelos Statue, near Eleftheria square, Heraklion)**

### **Session 6**

9.00-9.20 **Konstantinos Mavrokoridis**, University of Liverpool  
*"ARIADNE: a novel photographic liquid argon particle physics detector"*  
ERC StG: ARIADNE, ARgon ImAging DetectioN chambEr

- 9.20-9.40 **Maria Rentetzi**, Technical University of Berlin  
*"Living with Radiation: how to do an interdisciplinary project between humanities and nuclear sciences"*  
ERC CoG: HRP-IAEA, Living with Radiation: The Role of the International Atomic Energy Agency in the History of Radiation Protection
- 9.40-10.00 **Thomas Sotiriou**, University of Nottingham  
*"Challenging Einstein's Theory"*  
ERC StG: CGR2011TPS, Challenging General Relativity
- 10.00-10.20 **Ioannis Stefanou**, École des Ponts ParisTech, IFSTTAR  
*"Controlling earthQuakes"*  
ERC StG: CoQuake, Controlling earthquakes
- 10:20-10:50 **Coffee break**

## **Session 7**

### **Presentations by ERC-funded students/postdocs at FORTH**

- 11:00-11:15 **Callina Stratigi**, Garinis Lab, IMBB-FORTH  
*"DNA damage triggers cytoplasmic ssDNA accumulation leading to chronic inflammation in NER progeria"*
- 11:15-11:30 **Jeff Andrews**, Zexas Lab, IESL-FORTH
- 11:30-11:45 **Konstantinos Palikaras**, Tavernarakis Lab, IMBB-FORTH  
*"Coupling mitophagy and mitochondrial biogenesis during ageing"*
- 11:45-12:00 **Dimitris Sofikitis**, Rakitzis Lab, IESL-FORTH  
*"Signal reversing cavity-based polarimetry: Evanescent-wave and ambient chiral sensing"*
- 12:00-12:15 **Emmanouela Kallergi**, Nikoletopoulou Lab, IMBB-FORTH  
*"Proteomic profiling of autophagic cargo in the brain".*
- 12:15-12:30 **Spiros Chavlis**, Poirazi Lab, IMBB-FORTH  
*"Probing the role of CA1 neurons in spatial learning: models and experiments"*
- 12:30-12:45 **Raphael Sklidis**, Tassis Lab, IESL-FORTH  
*"PASIPHAE: Clearing the path to experimental tests of inflation"*
- 13:00-14.30 **Lunch break (for registered participants)**

## **Session 8**

- 14.30-15.00 **Eva Kondorosi**, HUNGARIAN ACADEMY OF SCIENCES and ERC Vice-President

*"The miracles of symbioses"*

- 15.00-15.20 **Ioannis Papakonstantinou**, DEEE, University College London  
*"Smart Coatings for Energy Conservation and Energy Generation"*  
ERC StG: IntelGlazing, Intelligent functional glazing with self-cleaning properties to improve the energy efficiency of the built environment
- 15.20-15.50 **Zoi Lygeroy**, School of Medicine, University of Patras  
*"From Genome Integrity to Genome Plasticity: insights into cancer evolution"*  
ERC CoG: DYNACOM, From Genome Integrity to Genome Plasticity: Dynamic Complexes Controlling Once Per Cell Cycle Replication
- 15.50-16.10 **Petros Koumoutsakos**, ETH, Zurich  
*"Learning Synchronized Swimming"*  
ERC AdG: FMCoBe, Fluid Mechanics in Collective Behaviour: Multiscale Modelling and Applications
- 16.10-16.30 **Vana Kalogeraki**, Athens University of Economics and Business - Research Center  
*"Mobile Human-Centered Systems"*  
ERC StG: NGHCS, Creating the Next-Generation Mobile Human-Centered Systems"
- 16.30-17.00 **Coffee break**
- 17.00-18.30 Round table discussions with ERC Council members and ERCEA personnel: ***Evolution of ERC funding in the short (Horizon Europe) and long term.***
- Panelists:** **Grantees:** Elias Kiritsis, UoC (moderator), Petros Koumoutsakos, ETH and Ioannis Papakostandinou, UCL  
**ERC Council:** Prof. Klaus BOCK, Prof. Paola BOVOLENTA, Prof. Reinhilde VEUGELERS  
**ERCEA:** Jose LABASTIDA, Angela LIBERATORE
- 18.30-18.45 Closing remarks
- 19.00 **Bus departs for City Center (Meeting Point: FORTH Main Entrance)**