



האוניברסיטה העברית בירושלים
The Hebrew University of Jerusalem

American Physical Society
Racah Institute of Physics

Workshop

Programs of APS sponsored mini-workshops

Dear Visitor of this web-page,

This is a web-page of meetings, organized within the frame of the American Physical Society Program “International Friends of APS Activity Grants”.

It is stated in a letter from Dr. Amy Flatten, APS Director of International Affairs from 23.12.10: “The International Friends network aims to serve as *a first step in a larger effort* by APS to better serve its international membership. Friends will serve as the Society’s “ambassadors” at their institutions and will help us to communicate with other APS members. Moreover, the International Friends are regarded as advisors—a source for advice and insight from our international members as we endeavor to expand our international offerings”.

APS approved a request for funding of a small meeting by APS International friend, APS Fellow M. Ya. Amusia for the first time in a letter of APS dated 26.08.11 and signed by Michele Irwin, International Programs Administrator, who contributed a lot to establishing and continuation of this series of meetings, of which till 2016 we already had six.

Below one can find titles, programs, and postscript versions of the presented talks along with photo galleries of these meetings.



1. **18.01.12** *Crossing the domains within physics: fullerenes and endohedrals as an object, where atomic, molecular and condensed matter physics are getting together* Presentations **M. Ya. Amusia**

“Resonances in photon absorption by fullerenes and endohedrals”

([Talk 1](#)), **Rolfe Herber** “What we, experimentalists, want to have from theorists in this domain.



[Photo gallery 1](#)



2. 12.12.12 at 12.12.12 *Friction in physics and society* Prof. M. Ya. Amusia, Introductory remarks ([Talk 2a](#)), Prof. J. Fineberg “How things slide: Rapid Dynamics at the onset of friction” ([Talk2b](#)), Prof. S. Solomon “A Physicist View at Economic and Social Crisis Dynamics: Negative Friction Amplifies, Local Random Events to Systemic Complex Changes” ([Talk 2c](#)), Pre-dinner talk Prof. M. Amusia, A mistake of a Genius (An example of mixed friction – both in physics and society) ([Talk 2d](#))



[Photo gallery 2](#)



3. 25.12.13 *What physics can say about climate changes* Prof. M. Ya. Amusia, “Introductory remarks” ([Talk 3a](#)), Prof. N. Shaviv “The Role of the Solar Forcing in the 20th century climate change” ([Talk 3b](#)), Prof. D. Rosenfeld “The dominant role of aerosol cloud-mediated forcing in the uncertainty of anthropogenic climate forcing and climate sensitivity” ([Talk 3c](#)), Pre-dinner talk: M. Ya. Amusia “Non-physics speaks on climate changes” ([Talk 3d](#)).

[Photo gallery 3](#)



4. 06.01.15 *Quantum computing: achievable reality or unrealistic dream?* Prof. M. Ya. Amusia “Introductory remarks” ([Talk 4a](#)), Prof. G. Kalai “What can we learn from a failure of quantum computers” ([Talk 4b](#)), Prof. N. Katz “Quantum information science - the state of the art” ([Talk 4c](#)), Pre-dinner talk: M. Ya. Amusia “Quantum Computing and I” ([Talk 4d](#)).



[Photo gallery 4](#)



5. 16.12.15 *Centennial journey – from classic light to quanta and back* (*International Year of Light IYL2015*), Prof. M. Ya. Amusia “Introductory remarks” ([Talk 5a](#)), Prof. G. Markus “High energy, short pulse lasers – source for high field and ultrafast processes” ([Talk 5b](#)), Prof. M. Amusia “Theory of photoionization by low and high intensity photon beams” ([Talk 5c](#)), Pre-dinner talk: H. Steinberg “Electro-optics with scotch tape: a new generation of devices” ([Talk 5d](#)).



[Photo gallery 5](#)



6. 14.12.16 *Quantum biology. Does it exist and is this important?* Prof. M. Ya. Amusia “Introductory remarks” ([Talk 6a](#)), Prof. Y. Paltiel “The physicist’s view on quantum biology” ([Talk 6b](#)), Prof. N. Keren “Is there anything quantum in biology and if so, is it important?”



([Talk 6c](#)) General Discussion “We - to APS, APS – to us”. Moderators **M. Amusia** and **R. Herber**, Pre-dinner talk Prof. **M. Ya. Amusia** Can one predict the future? Can one shape it? ([Talk 6d](#))

[Photo gallery 6](#)



20.03.18 *Can physics be useful to human genetics?*
Prof. **M. Ya. Amusia** “Introductory remarks” ([Talk 7a](#)), Prof. **D. Behar** “The study of paternal lineages among Jews: the case of the Levites” ([Talk 7b](#)), Prof. **L. Carmel** “Reconstructing ancient epigenomes: what Neanderthals teach us about ourselves??” ([Talk 7c](#))
General Discussion “We - to APS, APS – to us”.
Moderator **M. Amusia**

