

November 14, 2016

To: the Bureau of the Physics Division of the Russian Academy of Sciences

To: Prof. Nikolay Kalachevsky, Director of the Lebedev Physical Institute

To: Dr. Maria Aksentieva and Editorial Board of the Journal "PHYSICS-USPEKHI"

To: Prof. Sergey Novikov, Petr Keldysh and all Family Members of Leonid Keldysh

Dear Colleagues, Friends and Family Members of Leonid Keldysh,

We are deeply mournful together with you... It is very hard to accept this loss...

In light of his seminal contributions, Leonid Keldysh definitely ranks among the most imaginative and influential physicists of the last five decades.

Keldysh's theory of ionization in a strong laser field (including the prediction of two ionization regimes via multiphoton absorption and optical tunneling, defined by the famous Keldysh parameter), Keldysh's non-equilibrium diagram technique, the Franz-Keldysh effect, his predictions of the electron-hole liquid phase and collective states of excitons in semiconductors, his theory of impact ionization in crystals, his concept of superlattices and other truly pioneering and original ideas have opened many fields of research in modern physics.

His ability to combine powerful theories with clear physical intuitions was truly remarkable.

We were very fortunate to have him as our colleague in the Department of Physics and Astronomy at Texas A&M University for seven years. It was our great privilege to have the opportunity to discuss physics with him and to express to him our appreciation and admiration. His passion about physics, his broad erudition and inspiration, benevolence and decency, his kind smile and mild sense of humor will remain in our memory as long as we live...

Professor Peter McIntyre, Head of the Department of Physics and Astronomy

Distinguished Professor David Lee, Nobel Prize in Physics in Physics 1996

Distinguished Professor Marlan Scully, Foreign Member of the Russian Academy of Sciences

Distinguished Professor Olga Kocharovskaya

Professor Vitaly Kocharovsky

Distinguished Professor Valery Pokrovsky

Distinguished Professor Edward Fry

Distinguished Professor Nickolas Suntzeff

Distinguished Professor Suhail Zubairy

Associate Professor Artem Abanov

Professor Glenn Agnolet

Assistant Professor Alexey Akimov

Professor Roland Allen

Professor Melanie Becker

Professor Katrin Becker

Professor Alexey Belyanin

Professor Sui Chin

Professor Darren DePoy

Professor Bhaskar Dutta

Associate Professor Tatiana Erukhimova

Professor Alexander Finkelstein

Professor Lewis Ford

Professor Stephen Fulling

Professor Emeritus Chia-Ren Hu

Professor Teruki Kamon

Professor Helmut Katzgraber

Professor Igor Lyuksyutov

Assistant Professor Jeniffer Marshall

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