

Prof. Ashot Chilingarian's Accomplishments Commemorated

Joseph Dagdigian

May 25, 2014



Left to right: Dr. Razmik Mirzoyan from the Max-Planck-Institute for Physics in Munich, Germany; Dr. , Dr. Hartmut Gemmeke from the Forshchum Centrum Physics Institute in Karlsruhe, Germany; Prof. Ashot Chilingarian, director of the Yerevan Physics Institute; and Dr. Johannes Knapp, astrophysicist from the University of Leeds in England and DESY in Germany.

Within the international physics community significant accomplishments of famous scientists are often recognized in symposiums honoring them. On Tuesday, May 20, a symposium at the Nor Ambert research station on Mt. Aragats commemorated Prof. Ashot Chilingarian's decades of achievement. Prof. Ashot Chilingarian is the director of the *Yerevan Physics Institute* (YerPhI) and head of its *Cosmic Ray Division* (CRD).

Dr. Razmik Mirzoyan of the *Max Planck Institute* in Germany opened the symposium and introduced Dr. Johannes Knapp, astrophysicist from the *University of Leeds* in England and *DESY* in Germany. Dr. Knapp chronicled Prof. Chilingarian's career from his first published paper in 1975 to his appointment as head of the CRD in 1993 and, 11 years later, to the directorship of the entire physics institute. Not only did Dr. Knapp iterate many of Chilingarian's contributions in the fields of physics, mathematics, and neural networks, but he stressed Chilingarian's organizational ability and his support of bright young Armenian students, some of whom were in the audience.

The next speaker, Dr. Hartmut Gemmeke, who recently retired from the *Forshchum Centrum physics institute* in Karlsruhe, Germany, related early collaborations with Prof. Chilingarian when he (Gemmeke) was a post-doctoral scholar. He cited Chilingarian's contributions to space weather research. He concluded with a couple of poems he authored about Prof. Chilingarian's career.

Dr. Razmik Mirzoyan from the *Max-Planck-Institute for Physics* in Munich, Germany concluded the talks with a description of the development of Cherenkov Radiation telescopes and the contributions Prof. Chilingarian has made to this technology. Mirzoyan is the chairman of the MAGIC collaboration for a large telescope in the Canary Islands.

Prof. Chilingarian has more than 380 scientific publications and has won more than 20 research grants totaling more than 2.5M USD from foundations such as the International Science and Technology Center (ISTC), International Technology and Science foundation (INTAS) and others.

He is the author of the ANI (Analysis and Nonparametric Inference) computer code library, which has been extensively used by the international cosmic ray physics community during the last few decades for multidimensional analysis of data from modern cosmic ray detectors. He also introduced the "multidimensional nonlinear cuts" method for analyzing data from the Atmospheric Cherenkov Telescopes (ACT) and event-by-event analysis for Extensive Air Shower experiments. The Data Visualization Interactive Network (DVIN) was developed under his supervision. This project won a UN World Summit on Information Society award in Geneva in 2003.

He is the founder of the Aragats Space Environmental Center (ASEC) and the Space Environmental Viewing and Analysis Network (SEVAN), multinational scientific collaborations led by Armenia. In turn Prof. Chilingarian is Armenia's representative in other international collaborations such as the world wide neutron detector network led by Japan, The Space Weather Initiative led by NASA, the International Commission on Space Research (COSPAR) and many others.

Other guests at the symposium and the subsequent dinner honoring Prof. Ashot Chilingarian included Dr. Bruce Boghosian, a physicist from Tufts University who is concluding his 4th year as president of the American University of Armenia, Dr Michel Davudian from France and the president and CEO of OZONE internet service company in the Shirak Marz and founders of the *Support Committee for Armenia's Cosmic Ray Division* Anahid Yeremian and Joseph Dagdigian.. Besides YerPhI staff members, also in attendance were graduate students studying at CRD.

Photographs: