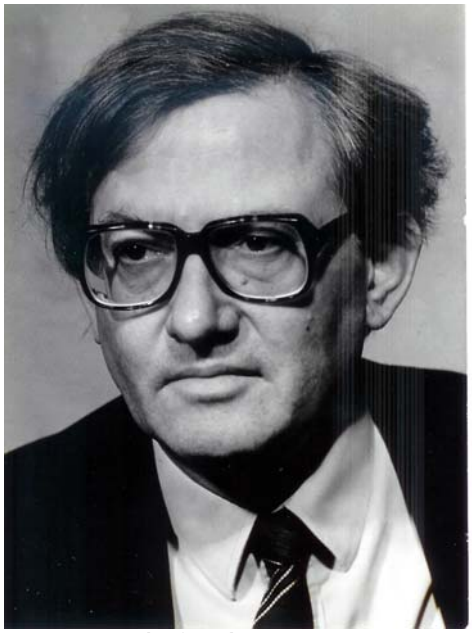

József Zimányi 1931-2006

József Zimányi, the high-energy nuclear physicist who first established relativistic heavy-ion research in Hungary, died on 26 September 2006. His passing is a great loss for Hungarian and European science, especially for the heavy-ion community.

Jozsó (as he was known to his friends) was born in Budapest in 1931. He caught the physics bug at an early age: he was 16 when he constructed a small model of Europe's first Moon radar experiment in Zoltán Bay. After graduation with a PhD in physics from the Eötvös Loránd University, in 1955 he moved to the Central Research Institute for Physics in Budapest. Although he travelled frequently in later years, he remained faithful to his favourite institute for more then 50 years.

He worked first on nuclear spectroscopy experiments, where his speciality was measuring γ-γ angular correlations in nuclear decays. After 15 years of successful work in this area his interest shifted to the new-born field of heavy-ion collisions. In 1969 he visited the Niels Bohr Institute in Copenhagen where discussions were taking place about the potential of colliding heavy ions at high energies. He joined the enthusiastic group of "heavy-ion physicists" and was invited many times to Copenhagen to participate in their common research work.

In parallel Jozsó began to build bases in Budapest. In 1973 he became head of the Theoretical Physics Department which, through his tireless efforts, he gradually transformed into one of the leading theoretical centres for heavy-ion physics. In the mid 1970s he started to publish theoretical papers himself. His first, widely appreciated theoretical work discussed hydrodynamical aspects of heavy-ion collisions and became famous as the Bondorf-Garpman-Zimányi model. To follow non-equilibrium processes he also developed the Montvay-Zimányi hadrochemical model. When experimental results from the BEVALAC at Berkeley ignited widespread interest, he investigated properties of pionic Bose-Einstein condensation. Later he made an excursion into biophysics, investigating pattern recognition with neural networks.

At each stage Jozsó advised talented students who were attracted by his exciting work and enthusiastic personality. He nurtured them with great care during their evolution into mature scientists, using his many international connections to expose them at an early stage to foreign academic cultures and important new ideas; this was the secret behind his successful establishment of the Budapest school. Jozsó used to say "A successful model must be simple and effective, just like a shaving blade."

In the 1990s Jozsó strongly supported Hungarian participation in CERN's extended heavy-ion research programme. In particular in 1992 he masterminded Hungary's membership of CERN, with which new opportunities became available for Hungarian physicists. Jozsó himself became a member of the NA49 Collaboration to which he made many important contributions. He represented Hungary on the CERN Council and was a member of the Hungarian CERN committee from 1992 to 2004. He also provided his full support for the Hungarian activities in the ALICE experiment at the LHC and for the foundation of the Budapest LHC GRID station at the Research Instutute for Particle and Nuclear Physics (RMKI). In parallel, he supported the activity of the Hungarian PHENIX group, which since 2001 has participated in ultrarelatistic heavy-ion experiments at RHIC in Brookhaven.

In the mid 1990s Jozsó also played an active role in the reorganization of the Hungarian scientific grant system. Drawing on his extensive experience with foreign funding agencies, acquired during his many travels, he and his colleagues created a peer-review system similar to the system of the National Science Foundation in the US. The Hungarian system, OTKA, has worked for the past 15 years with great success.

Despite all these administrative duties Jozsó never lost his active touch with physics. These same years saw the birth of the Zimányi-Moszkowski model for an improved mean-field theoretical description of nuclear matter; of the SPACER model for full-scale pion interferometry investigations; and of the ALCOR coalescence model to explain hadronic production ratios at CERN's SPS, which garnered even greater success when experimental results from RHIC lent strong support to the existence of a quark coalescence mechanism for hadron production at intermediate transverse momenta.

Jozsó became a member of the Hungarian Academy of Sciences in 1990 and the European Academy of Arts, Sciences and Humanities elected him to membership in 1997. In 1992 he received the Officer Cross of the Order of Merit of the Hungarian Republic, and the Szechenyi Prize was bestowed upon him by the President of Hungary in 2000.

Jozsó was working until his last days with the same extraordinary activity and driving force that has been an inspiration to his students and close colleagues throughout his life. His students, friends and followers feel a great loss; they will keep his heritage alive in Budapest and around the world.

A workshop was held in Zimányi's memory at the beginning of July, see http://www.kfki.hu/~zj75/.

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Ulrich Heinz, Ohio State University, and Peter Lévai, RMKI Budapest.