

K.G. Chetyrkin–60: Grandmaster of Loops

On February 14 – 15, 2011, a conference called “Loops in Quantum Field Theory” was held at Karlsruhe Institute of Technology (Technical University), <http://www-ttp.particle.uni-karlsruhe.de/Kostjafest/kostjafest.html?DE>. This meeting was organized to celebrate 60th birthday of Konstantin Chetyrkin, one of the first members of the Theory Division of INR, who is now based in Karlsruhe. The conference was attended by numerous Konstantin’s friends and colleagues from Germany, Russia, Canada, Switzerland and other countries.

Konstantin graduated Moscow State University, and for good part of his research career he worked in INR. Many of his excellent papers were written here, and he carries the momentum gained in Moscow/Troitsk through his entire scientific life. He keeps close contacts and continuously collaborates with Russian physicists living both in Russia and elsewhere.

Konstantin is famous worldwide for his creation and development of new methods in quantum field theory, based on perturbation theory and involving calculations of multi-loop Feynman diagrams, and for a large number of concrete — and pioneering — results in high energy physics and physics of hadrons, which he obtained by making use of these methods. His results have found extensive applications and are employed in the analyses of data coming from various particle physics experiments, including experiments at the Large Hadron Collider. He educated many theorists of younger generation and successfully collaborates with the best experts in the field. As B. Kniehl put it in his talk, Konstantin Chetyrkin is one of a very few Grandmasters of Loops, and he fully deserves this title.