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World-renowned professors Vojtěch Rödl, Jan Vaňous, Jiří Vítek and Bedřich Velický have received the 2013 Neuron Award for Lifelong Achievement. During their presentation at Malostranská beseda on 5 November they agreed that the fundamental influence on their careers were the inspirational scientific personalities that they met during their careers. The Foundation awarded prizes for lifelong achievement in the field of mathematics (Professor Vojtěch Rödl), medicine (neuroradiologist Jiří Vítek) and economics (Professor Jan Vaňous). The award for physics, which was bestowed for the first time ever, was received by Professor Bedřich Velický, the only one of the recipients who is resident in the Czech Republic, working at the CU Faculty of Mathematics and Physics. In his appreciation of the award-winner, Professor Jiří Chýla emphasised the three aspects of Professor Velický's works – his research into semiconductors, disorganised substances and quantum transfer, his pedagogical activities and, last but not least, his organisational activities (contribution to the transformation of the Academy of Sciences following the Velvet Revolution and instigation of the creation of its grants agency).

"Theoretical solid-state physics is a somewhat unheralded field," said Professor Velický at the beginning of his presentation, adding: "Everyone knows terms such as black holes from cosmology and neutrinos or the Higgs boson from particle theory, but who has heard of emission or localisation? It's not something that people are interested in, which I find incredible, because solid-state physics affects everything that surrounds us, taking a unified approach to these substances and founded on physical principals," complained Professor Velický, whose goal it is to describe, or even predict, various observed phenomena on the basis of the standard solid-state model.

"Steve Weinberg, a favourite of Professor Chýla's, wrote several times that this work is not at all interesting, because the equations are known, because whatever you explain, it's not a discovery, but a game. I have been studying these games all my life," explained the leading expert on disorganised systems and disequilibrium events in solid-state substances. Professor Chýla has published more than 100 studies and is referenced more than 3,500 times in specialist literature.

Professor Vojtěch Rödl was the first Czech mathematician to be invited to give one of the main plenary talks at the world mathematicians' congress. During his presentation he highlighted his discreet colleague, Professor Jaroslav Nešetřil, a graduate of the CU Faculty of Mathematics and Physics who has been working in the USA since 1987 and currently teaches at Emory University in Atlanta.

Apart from bestowing awards, the <u>Neuron Foundation</u> will this year provide financial support totalling 4 million crowns in the fields of medicine, mathematics, physics and economics. A grant worth one million crowns in the field of economics has been awarded to Ing. Filip Pertold, Ph.D., from CERGE-EI, a joint centre of CU and the Czech Academy of Sciences. Ing. Pertold will research the comparison of the chances of mother finding employment in the Czech Republic and Denmark. An equal amount has been awarded in the field of physics to Ing. Michal Malinský, Ph.D., who shall research the basic building-block of all atomic nuclei, the proton, and any limits on its lifespan. Half a million crowns has been awarded in the field of mathematics to theoretical computer scientist associate professor Mgr. Michal Koucký, Ph.D., for a study that will demonstrate whether a certain mathematical problem can be effectively solved. "We are trying to show that it is possible to support basic research without lots of paperwork," said well-known science benefactor Karel Janeček at the meeting.