

Happy 70-th birthday professor Marko Tadić



This issue of Rad HAZU is dedicated to professor Marko Tadić, a full member of Croatian Academy of Sciences. Professor Tadić was born on November 16, 1953 in Kolo (near the town of Tomislavgrad, Bosnia and Herzegovina). He graduated mathematics at the University of Zagreb in 1976, and finished his Ph.D. thesis in 1980 at the University of Zagreb under supervision of professor Dragan Miličić. He has been professor at the Department of Mathematics, Faculty of Sciences, University of Zagreb for all of his career. Professor Tadić has been visiting and lecturing at many universities and institutes including the very prestigious University of Chicago, Université Paris 7, Max-Planck-Institute für Mathematik (Bonn), University of Utah, Sonderforschungsbereich 170, Geometrie und Analysis (Göttingen), Mathematisches Institut Der Universität Münster, The Hong Kong University of Science and Technology, Institute of Mathematical Sciences (Singapore), Hebrew University (Jerusalem), Mathematical Institute in Oberwolfach, Weizmann Institute of Science (Rehovot), Erwin Schrödinger International Institute for Mathematical Physics (Vienna) etc.

Professor Tadić is world renowned leading expert in representation theory of reductive p -adic groups and Langlands programme. The paper of Hanzer and Grbac *"The Tadić philosophy: an overview of the guiding principles and underlying ideas in the work of Marko Tadić"* in this issue describes his works in detail. We mention here two key results. Firstly, one of his early

fundamental contributions is the classification of unitary irreducible complex representations of the p -adic general linear group $GL(n)$. That was published in 1986. The result at that time was really surprising and deep (methods even apply to real and complex $GL(n)$). It has been in use ever since with major applications in various problems in the Langlands programme, such as, for example, the very recent deep works of Arthur. Secondly, since the nineties of the last century, the main line of research in the Langlands programme has been concentrated on classical groups. Because of that, professor Tadić had turned his attention to the problems of the classification of irreducible representations of classical p -adic groups. The problems in this case are much more difficult than for $GL(n)$, and developing his method of Jacquet modules he was able to achieve a lot. We would like to mention here that he was able to achieve, jointly with C. Mœglin, very elegant, complete and explicit construction of discrete series for classical groups which are cornerstones of the classification of all irreducible representations.

The impact of professor Tadić in developing a world class research in mathematics in Croatia is invaluable. He was encouraging and supporting development of research in representation theory, automorphic forms and number theory. The articles in the present issue reflect this.

For his outstanding accomplishments, professor Tadić has received many awards and recognitions including *Prize "Ruđer Bošković"* 1989 (the highest annual prize for natural sciences in Croatia), medal *Red Danice Hrvatske s likom Ruđera Boškovića* 1996, *Andrija Mohorovičić prize* of University of Zagreb (2013). He was elected to a full member of the Croatian Academy of Sciences and Arts and the Academia Europea in 2000.

Goran Muić
Guest editor