



For Wilfried Imrich's 80th Birthday

Wilfried Imrich was born on May 25th, 1941, in Vienna. After completing his doctoral dissertation in 1965, he worked at the IBM Laboratory in Vienna and as an (assistant) professor at the Technical University of Vienna. During the main part of his career, from 1973 until his retirement in 2009, he was a professor of applied mathematics at the Montanuniversität Leoben.



Figure 1: Wilfried at the University of Maribor ceremony in 2017, Archive University of Maribor.

Wilfried has published around 140 papers, many of them as the single author, and several of them with world's leading researchers. Let me highlight his paper "Finite homeomorphism groups of the 2-sphere" from 1974, written jointly with László Babai and László Lovász, Abel Prize laureate for 2021. It is also fascinating that Wilfried's research is still flourishing, just check his record in MathSciNet! The main topic (but not the only one!) of his research in the last years is distinguishing graphs based on their automorphisms, a topic that combines his love for group theory and graph theory.

In this place, however, we wish to emphasize Wilfried's extensive collaboration with Slovenian mathematicians which began in the 1980s. In 1981, he has co-organized the first Slovenian international conference on graph theory, an event extremely important for Slovenian mathematics, as it was the basis for the design of a series of conferences. The last two conferences in the series took place in 2015 and in 2019, and were, with around 300 participants each, world's largest conferences in those years dedicated to graph theory. Wilfried was also a co-founder of a seminar on graph theory called the Leoben-Ljubljana Graph Theory Seminar, which started in the 1980s and continued afterwards once a year on average.



It was my privilege to be Wilfried's first Slovenian doctoral student. He has also supervised Janez Žerovnik, while Iztok Peterin was supervised together by Wilfried and myself. In the last decades Wilfried was a regular visitor to Slovenia, mostly to the University of Maribor. He was, and still is (of course, in these times could be only on-line) a regular visitor to the Seminar in Discrete Mathematics at the Faculty of Natural Sciences and Mathematics in Maribor at which he also delivered numerous lectures. Wilfried has published around 30 papers jointly with Slovenian co-authors as well as three books dealing with graph products. The book (W. Imrich, S. Klavžar, *Product Graphs: Structure and Recognition*, Wiley-Interscience, New York, 2000, 358 pp) and its extended version (R. Hammack, W. Imrich, S. Klavžar, *Handbook of Product Graphs*, CRC Press, Boca Raton, 2011, 518 pp) are by now standard references for graph products, while the third book (W. Imrich, S. Klavžar, D.F. Rall, *Topics in Graph Theory: Graphs and their Cartesian Product*. AK Peters, Wellesley, 2008, 205 pp) deals with the general theory of graphs through the prism of the Cartesian product operation.

As a small token of appreciation for Wilfried's contributions to the development of Slovenian graph theory school, University of Maribor awarded him in 2017 the title Honorary Doctor of the University of Maribor; the present photo was taken during that ceremony.

Let me conclude with best wishes for Wilfried's round anniversary and a wish for a continuation of his excellent research for years to come. Happy birthday Wilfried!

Sandi Klavžar