



Kalevi Suominen

* 20.7.1940 † 4.3.2024

Kalevi Suominen, Professor of Mathematics at the University of Helsinki, died in Helsinki on 4 March 2024, in his home as he wished. He was born in Helsinki on 20 July 1940. Suominen passed his matriculation examination at the Finnish Lyceum in Pori in 1958 and then began studying at the University of Helsinki. He got off to an amazingly fast start, completing the legendarily difficult course nicknamed “The Big Integral”, one of the final courses in the mathematics curriculum, already in his first year with a grade of 3/3. The rest of his studies progressed rapidly and in 1967 he defended his doctoral thesis on the theory of quasiconformal mapping, which by then had become a focus area of Finnish mathematical research. His doctoral thesis was supervised by Professors Olli Lehto and Kalle Virtanen, who had published *Quasikonforme Abbildungen*, a seminal work in the field. In their foreword, the authors thanked Suominen for reviewing the manuscript and for his valuable comments.

Suominen also explored quasiconformal mappings between manifolds in his later studies. As a researcher, however, he followed his own path and published studies in the fields of algebraic geometry, topology, category theory and number the-

ory, which were relatively unknown in Finland. His collaborators included the Fields Medal-winning mathematician David Mumford, with whom he wrote *Introduction to the theory of moduli*, a work in the field of algebraic geometry. One of his best-known publications is *Localization of sheaves and Cousin complexes*, which was published in *Acta Mathematica* in 1973. He wrote several publications on the connection between elliptic curves and Fermat’s Last Theorem. Suominen carefully followed new trends in mathematics, which can be seen in his research and is also reflected in his seminars, where he discussed the latest ideas of the French Bourbakists, among others.

In 1970, Suominen was appointed Assistant Professor of Mathematics at the University of Helsinki, a title which was changed to Professor in 1998. Prior to this, he had held several full professorships as Acting Professor. Suominen was also a visiting professor in Denmark and Sweden. He also served as editor of *Mathematica Scandinavica*, a joint Nordic publication forum, and many of the authors remember his acute comments well.

Kalevi was modest and companionable. His students and colleagues admired his

straightforward and egalitarian approach to his juniors. He would invite his graduate students to his home for visits and attend their family events. During debates around the coffee table, Kalevi could surprise others with his knowledge in a wide variety of fields, but he never tried to knock his interlocutors down but would broaden their general knowledge in his own docile manner. His graduate students also benefited from his versatility, as he was able to supervise doctoral theses in algebraic geometry, algebraic topology, category theory and number theory.

Suominen received several awards for his achievements. He won the Anders Donner Prize in 1961 and the Aug. Ramsay Prize in 1969. He was elected a member of

the Finnish Academy of Science and Letters at an unusually young age in 1973, and in 1993 he was awarded the Order of the Lion of Finland, First Class.

Although Suominen's mathematical research is difficult for the general public to understand, he was interested throughout his career in the applications of mathematics and particularly the use of computers. As a retirement hobby, he helped develop SymPy, an open-source library for symbolic computation, together with the international online community.

In testament to the strength of Kalevi's family ties, he passed away just a couple of months after the death of his beloved wife Pirkko. He is missed by his children Laura, Risto, Liisa and Markku and their families.

Obituary by Kaj Malm and Olli Martio