

Professor Emeritus Haakon Waadeland passed away peacefully on Christmas Day 2020. Haakon has for decades been a central and well-known person in the international community of researchers in Analytic Theory of Continued Fractions, with special ties to the University of Colorado, Boulder.

Haakon was born on 20 May 1927 in Grue in the south-east part of Norway, as son of a school teacher. He earned his Master of Science degree at the University of Oslo in 1950, and several years later moved to Trondheim. After having taught mathematics at an engineering college for a few years, he became a docent (associate professor, reader) at NTH, the Norwegian University of Technology, in 1957. He was appointed to a full professorship in 1965, and following this appointment he spent his time at AVH, the College of Arts and Science. AVH, as well as NTH and the engineering college where he started his career, are today included in NTNU, the Norwegian University of Science and Technology. When he retired in 1997, he had served NTNU and its predecessors for 45 years.

Already when working at the engineering college, Haakon started to collaborate with the mathematicians at NTH, in particular with the function theorist Ernst Jacobsthal. This collaboration led to work on univalent functions, and in 1954, Haakon published a paper on coefficient bounds for  $k$ -symmetric univalent functions. In 1958 he obtained his Doctor of Philosophy degree at the University of Oslo based on work on univalent functions. The main motivation for working on univalent functions at that time was the so-called Bieberbach conjecture, and this motivation is clearly visible in Haakon's papers from the 1950s.

In the early 1960s, Arne Magnus, then at the University of Colorado, Boulder, later at Colorado State University, Fort Collins, spent a sabbatical in Trondheim. This sparked Haakon's interest in continued fractions. Continued fractions were not new to him. In fact, his Master's thesis was on continued fractions, but from a number theoretic viewpoint. Now, he started to work on the analytic theory of continued fractions. Haakon went to Boulder in 1963 and spent the whole academic year 1963-1964 there, coming into contact with a larger research community in the field. In particular, Wolfgang J. Thron and William B. Jones became his close collaborators. They both spent sabbaticals in Trondheim, and Haakon went to Boulder for longer and shorter visits many times during his career. He regarded Boulder as his second home, and to keep his memory about Boulder fresh, he used names of streets in Boulder as passwords for his computer! Whenever he was told by the system to change his password, he switched to the next parallel street. His long-standing relationship with Boulder also meant that he got to know many of the other mathematicians at the department, not only the continued fraction group. Also, many of those who were PhD students in the area of continued fractions at Boulder became Haakon's friends, and I think both they and many others will subscribe to having been inspired by Haakon.

On the occasion of Haakon's 70<sup>th</sup> birthday, a conference was organized in his honor, Continued Fractions and Function Theory. The title of the conference reflects Haakon's research interests, and its acronym ConFun (with fun) was chosen to emphasize Haakon's joy of doing and teaching mathematics. The conference resulted in a special issue of *Journal of Computational and Applied Mathematics*, available at [this link](#).

A list of Haakon's publications was compiled for the conference proceedings, showing more than 100 scientific papers, written with 16 different co-authors. Both these numbers grew later.

Haakon also contributed to CATCF, and two examples can be found [here](#) and [here](#). He also had several contributions to the journal before it went online.

Haakon was always eager and enthusiastic to try out new tools and new ideas, and he started to make use of computers (programming) to do experiments as part of his research long before this became standard among mathematicians. Also in his teaching, he tried to take advantage of the possibilities that new technology could offer. Already in the 1980s he took part in various projects on the use of computers, both as tools (numerical and graphical) in the teaching and learning of mathematics, and as more generic tools for online communication in distance education.

Long after his retirement he was active doing mathematics and came regularly to the Department. He spent his last years in a nursing home. His wife Ruth passed away in the spring of 2020, and they are survived by two children and a large number of grandchildren and great grandchildren.