

# The Icelandic Mathematical Society

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The Icelandic Mathematical Society (IMS), or “Íslenska stærðfræðafélagið” as its name is in Icelandic, was founded 70 years ago on 31 October 1947. It was founded on the 70th birthday of Dr Ólafur Daniélsson at his home and in his honour. There were 15 founding members and eight of them were mathematicians; the others included three physicists, two engineers and two astronomers. The declared purpose of the society was to be a platform for Icelanders, who had a university education in mathematics or a related subject, to meet and discuss subjects related to mathematics. It should be noted that in 1947, Iceland was a very backward country with just 133,000 inhabitants. It had only been independent for three years and the dominant economies were agriculture and fishing. The University of Iceland, the oldest and largest university in Iceland, was founded in 1911 but teaching and research in mathematics first started in 1943 when Dr Leifur Ásgeirsson was hired to the engineering department. Ásgeirsson had studied mathematics at the Georg-August University in Göttingen and received his Dr. rer. nat. degree from Dr Richard Courant in 1933. He is mainly known for his mean value theorem for ultrahyperbolic partial differential equations and was one of the founders of the IMS.

The IMS has declared three honorary members: Dr Ólafur Daniélsson (1877–1957), who was a pioneer in mathematics education in Iceland, Dr Leifur Ásgeirsson (1903–1990), who was the first mathematics professor in Iceland, and Dr Sigurður Helgason (b. 1927), who is an emeritus professor of mathematics at Massachusetts Institute of Technology, USA. In celebration of his 90th birthday last September, Helgason founded an annual monetary prize to be awarded to exceptional undergraduate students of mathematics at the University of Iceland. Over the years, the IMS has been involved in some publishing work, both together with the other Nordic Mathematical Societies (*Mathematica Scandinavia* and *Nordisk Matematisk Tidskrift*) and on its own. In an old tradition, foreign words are given special Icelandic names and one of the publications of the IMS is an English-Icelandic dictionary for mathematical words. In the dictionary, the editors have shown much originality and imagination in inventing numerous Icelandic words for mathematical concepts. As an example, the Icelandic word for “dual space” is “nykurrúm” (“rúm” is “space” and “nykur” is an old mythical creature similar to a horse but with the hooves reversed).

Today, the IMS has close to 300 members and serves as the umbrella organisation for mathematicians in Iceland. This is in contrast to the mathematical societies of the other Nordic countries, which are much more connected to the universities than to the lower levels of education. One of the main activities of the IMS is the

monthly meetings, where a member or a guest gives a talk and the members traditionally meet before the talk to have coffee and a Danish and discuss mathematics. Some well known mathematicians who have given guest talks at these meetings are Dr André Weil and Dr Paul Erdős, the latter of whom gave three talks on his first visit to Iceland and one on his second visit. To give some idea about the diversity of these talks, the last three were: “Mathematics: professional development for teachers and enrichment for students”, given by Dr Uwe Leck and Dr Ian Roberts (who are affiliated to the Europa-University in Flensburg, Germany, and the Charles-Darwin University in Darwin, Australia, respectively); “The Social Cost of Carbon Dioxide – Mitigating Global Warming Whilst Avoiding Economic Collapse”, given by Dr Christopher Kellett from the University of Newcastle, Australia; and “Convey’s napkin problem”, given by Dr Anders Claesson from the University of Iceland. Additionally, the IMS is involved in organising mathematical contests for gymnasium pupils and giving book prizes to exceptional pupils graduating gymnasium. Since 2001, the IMS has organised the biannual conference “Stærðfræði á Íslandi” or “Mathematics in Iceland”. The conference is usually attended by 40-50 people and the programme is in Icelandic. The talks include topics from mathematical research, teaching and the use of mathematics in industry.

As a final note, the word used for mathematics in most languages is some version of the Greek original “μάθημα”. In Icelandic, however, the word for mathematics is “stærðfræði”, which translates to “teachings of sizes”. It was introduced into the Icelandic language by Dr Guðmundur Finnbogason, a psychologist and philosopher, in his 1931 translation of Dr Alfred Whitehead’s *An Introduction to Mathematics*.



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