

Life of Lars Ahlfors

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Abstract

Lars Ahlfors (1907–1996) won mathematical fame in 1929, at the age of 21, when he solved the Denjoy conjecture. After that, his fruitful mathematical activity continued until the 1980s. During this half-century he was one of the leading complex analysts in the world. Time after time Ahlfors turned out to be both pioneer and prophet.

The story of his life begins in Helsinki, where he was born in April 1907. The father was a professor at the Polytechnic Institute, the mother died at Lars's birth. In 1933 Lars Ahlfors married the German born Erna Lehnert. Forty years later Lars wrote: "This was the happiest and most important event in my life."

In 1936 Ahlfors received one of the first two Fields medals. A member of the jury described his mathematical background: "Ahlfors is a most splendid representative of the famous Finnish school of function theory. His teachers were Ernst Lindelöf, the founder of the Finnish school, and Rolf Nevanlinna, whose ideas and theories have influenced the research of Ahlfors."

In the 1930s Ahlfors spent three years at Harvard University but returned to Helsinki in 1938 having been invited to a new professorship. The research of complex analysis flourished in Helsinki, but the war soon put an end to it. Ahlfors saw the future of Finland in somber colours and decided to leave the country. His final destination became Harvard University, where he was professor from 1946 until his retirement in 1977.

In 1981, when Ahlfors received the prestigious Wolf Prize, the jury ended its report with the words: "Everyone working today in complex analysis is in some way a student of Ahlfors." Walter Hayman gave his students the advice "Watch Ahlfors" for finding out what developments in complex analysis were worth pursuing.

Ahlfors was a disciplined, hard-working mathematician. This did not prevent him from being an eager participant whenever the opportunity arose to enjoy a good time with his friends. The story of Lars Ahlfors would be incomplete if it did not tell of the unparalleled ability Lars and his wife Erna had to create and radiate joy.