

A Lost Mathematician, Takeo Nakasawa
The Forgotten Father of Matroid Theory

Hirokazu Nishimura and Susumu Kuroda, Editors

Matroid theory was invented in the middle of the 1930s by two mathematicians independently, namely, Hassler Whitney in the USA and Takeo Nakasawa in Japan. Whitney became famous, but Nakasawa remained anonymous until a decade or two ago. He left only four papers in the mathematical community, all of them written in the middle of the 1930s. It was a hard time to have lived in a country that had become as eccentric as Japan. Just as Nazism became more and more flamboyant in Europe in the 1930s, Japan became more and more esoteric and fanatical in the same time period. This book explains the little that is known about Nakasawa's personal life in a Japan that had, among other failures, lost control over its military. We do not know what forces caused him to be discharged from the Tokyo Institute of Arts and Sciences. His work was considered brilliant, his papers superb, if somewhat unconventional and mysterious in notation. We do know that, in the latter half of the 1930s, forced to give up his mathematical career, he chose to live as a bureaucrat in Manchuria, at that time a puppet state of Japan. He died in 1946 at Khovdovsk, at the age of 33, after some years of forced labor in Siberian and other USSR camps, without sufficient food or shelter to protect his health. This book contains his four papers in German and their English translations as well as some extended commentary on the history of Japan during those years. The book also contains 14 photos of him or his family. Although the veil of mystery surrounding Nakasawa's life has only been partially lifted, the work presented in this book speaks eloquently of a tragic loss to the mathematical community.

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