1. Record Nr. UNINA9910369931203321 Autore Sørheim Aashild **Titolo** Obsessed by a Dream [[electronic resource]]: The Physicist Rolf Widerøe – a Giant in the History of Accelerators / / by Aashild Sørheim Pubbl/distr/stampa Cham, : Springer Nature, 2020 Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-26338-X Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XXXIV, 511 p. 28 illus., 14 illus. in color.) Collana Springer Biographies, , 2365-0613 530 Disciplina Soggetti **Physics** Particle acceleration Cancer research Popular Science in Physics Particle Acceleration and Detection, Beam Physics Cancer Research History and Philosophical Foundations of Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto A Comfortable Home - Formative years 1902 - 1943 -- The World Awaits - The new life in Switzerland 1946 - 1996 -- The Dark Chapter - Working in Germany during the war -- Treason Case number 3418 -The papers in the National Archives -- But There Was More - The papers in the British and American Intelligence Archives -- Why? - The unanswered question of why he went to Germany -- Postscript: The Letter from his Brother. . Sommario/riassunto This Open Access biography chronicles the life and achievements of the Norwegian engineer and physicist Rolf Widerøe. Readers who meet him in the pages of this book will wonder why he isn't better known. The first of Widerøe's many pioneering contributions in the field of accelerator physics was the betatron. He later went on to build the first radiation therapy machine, an advance that would eventually revolutionize cancer treatment. Hospitals worldwide installed his

machine, and today's modern radiation treatment equipment is based

on his inventions. Widerøe's story also includes a fair share of drama, particularly during World War II when both Germans and the Allies vied for his collaboration. Widerøe held leading positions in multinational industry groups and was one of the consultants for building the world's largest nuclear laboratory, CERN, in Switzerland. He gained over 200 patents, received several honorary doctorates and a number of international awards. The author, a professional writer and maker of TV documentaries, has gained access to hitherto restricted archives in several countries, which provided a wealth of new material and insights, in particular in relation to the war years. She tells here a gripping and illuminating story.