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Erich Regener - a forgotten cosmic ray pioneer PER CARLSON, KTH, Stockholm, ALAN WATSON, University of Leeds, UK — In the 1930s the German physicist Erich Regener (1881-1955), did important work on the measurement of the rate production of ionisation in the atmosphere and deep under-water. He discovered, along with one of his students, Georg Pfotzer, the altitude at which the production of ionisation in the atmosphere reaches a maximum, often and misleadingly called the Pfotzer maximum. He was one of the first to estimate the energy density of cosmic rays, an estimate used by Baade and Zwicky to postulate that supernovae might be the source of cosmic rays. Yet Regener's name is little known largely because he was forced to take early retirement by the National Socialists in 1937 as his wife had Jewish ancestors. In this paper we review his work on cosmic rays and the subsequent influence that he had on the subject through his son, his son-in-law, his grandson and his students. He was nominated for the Nobel Prize in Physics by Schroedinger in 1938. He died in 1955 at the age of 73.

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