

Otto Ruehr (Born 1933)

[11, 34, 1963, 2002, 2, 3, 0]

Otto Ruehr is a retired mathematician who specialized in the study of mathematics and its application to problems in physical sciences. He obtained his PhD at the University of Michigan in 1963 working under the direction of Charles L. Dolph. Through Dolph he is a descendant of a number of very famous mathematicians including David Hilbert, Ferdinand von Lindemann (who proved that  $\pi$  is a transcendental number), Carl Gauss, Leonard Euler, Dirichlet, Poisson, Fourier, Lagrange, Laplace, d'Alembert, etc. Ruehr is a mathematical "grandchild" of Salomon Bochner, another famous mathematician. His dissertation is entitled "Nonlinear Modeling Functions of a Special Type". His work ranged from such pieces as "Unsteady State Flow in Pipeline Networks" (Sep 1966) which studied liquid flows in natural gas pipelines to more modern articles such as "Asymptotic Behavior of a Melting Interface" (Mar 1989) which studied the behavior of melting solids. Ruehr went on to be a Professor of Mathematics at Michigan Technological University and is cited with 34 citations. Despite this, he supervised no doctoral theses and as such has no "descendants" Of note to this class is a 2019 article by our very own Dr. Doron Zeilberger and collaborator Shalosh Ekhad which responds to a solution given by JP Alouche to an identity which Dr. Ruehr gave in the 1980s in the American Mathematical Monthly. Zeilberger and Ekhad note that the Zeilberger algorithm has largely rendered the literature surrounding binomial coefficients obsolete since the Zeilberger algorithm's implementation in Maple has allowed mathematicians to prove results that were previously not possible due to computational constraints. The whereabouts of Dr. Ruehr are unknown. He is Professor Emeritus at Michigan Technological University.