

Julia Robinson and Hilbert's Tenth Problem

Reviewed by

Marjorie Bicknell-Johnson, 665 Fairlane Avenue, Santa Clara, CA 95051

marjohnson89@earthlink.net

DVD, Zala Films: 2008

ISBN 978-097245885-6.

announced in

Notices of the American Mathematical Society, May 2008 and

Video Librarian, July/August 2008.

Surely most readers of *The Fibonacci Quarterly* are familiar with Hilbert's Tenth Problem, proposed in 1900: Does there exist a universal algorithm for solving Diophantine equations? The impossibility of obtaining a general solution was proven by Yuri Matiyasevich in 1970 by showing that the relation $n = F_{2m}$ is Diophantine. Julia Robinson (1919–1985) not only devoted her life to solving H10, but also was instrumental in finding Matiyasevich's negative solution. Way back when, the very first talk that Julia gave announcing the triumphant conquering of H10 was at a meeting of the Fibonacci Association in San Jose, California.

The DVD *Julia Robinson and Hilbert's Tenth Problem* develops the mathematical story of H10 intertwined with the life of a brilliant woman captivated by the lure of unsolved mathematical problems who overcame formidable obstacles to assume a leading role in number theory. While this documentary will have special appeal to mathematicians, general viewers will appreciate this engaging portrait of Julia, a tale of love, disappointment, obsession, and triumph.