

Julia Bowman Robinson (née *Julia Bowman*) (1919 - 1985) American mathematician and author.

The daughter of a machine tool salesman and a housewife, Julia was born in Missouri but after the death of her mother two years later the family moved to Arizona. There, she enjoyed “arranging pebbles in the shadow of a giant saguaro on the Arizona desert,” something which became her earliest memory (Reid & Robinson, 1987). Then the family moved to San Diego, staying there for decades. In the high school there, at the time, girls had the option to drop math from their studies, something they all did with the exception of Julia Bowman. She continued her study of mathematics at San Diego State College despite trouble paying tuition due to the Great Depression. Transferring to the University of California, she was taught number theory by Raphael M. Robinson, who introduced her to the theories of Kurt Gödel.

In 1942, Julia married Raphael and took his name. With the United States now drawn into World War II, Julia Robinson worked at the Berkeley Statistical Laboratory, which supported military operations. In 1948, supervised by Alfred Tarski, Robinson wrote a thesis on decision problems, earning her Ph.D. Next she worked on a problem suggested by Tarski, related to the tenth of Hilbert’s problems. Though she was unable to solve the problem, when Yuri Matiyasevič disproved it in 1970, he recognized Robinson’s contributions. And it was her later collaborations with Matiyasevič which earned her <http://planetmath.org/ErdHosNumberErdős> number 3 (since Matiyasevič wrote with Richard K. Guy a paper on “A new formula for π ” for *American Mathematical Monthly* and Guy had written with Erdős a paper on lattice point distances in *Elementary Mathematics*).

In 1982, she became the first woman elected president of the American Mathematical Society. By now her health had deteriorated due to the same heart problem which back in 1945 had prompted doctors to advise her not to have children. But it was leukemia, diagnosed in 1984, which led to her death in 1985.

References

- [1] C. Reid & R. M. Robinson “Julia Bowman Robinson” in *Women of Mathematics: A Bibliographic Sourcebook* L. Grinstein, P. Campbell, eds New York: Greenwood Press (1987): 182 - 189