

## Paul R. Halmos - Lester R. Ford Awards

The Paul R. Halmos-Lester R. Ford Awards recognize authors of articles of expository excellence published in *The American Mathematical Monthly*. The awards were established in 1964 as the Ford awards, named for Lester R. Ford, Sr., a distinguished mathematician, editor of *The American Mathematical Monthly*, 1942–1946, and President of the Mathematical Association of America, 1947–1948. In 2012, the Board of Governors designated these awards as the Paul R. Halmos–Lester R. Ford Awards to recognize the support for the awards provided by the Halmos family and to recognize Paul R. Halmos, a distinguished mathematician and editor of the *Monthly*, 1982–1986.

### J. H. Conway, M. S. Paterson & Moscow (U.S.S.R.)

“A Headache-Causing Problem,” *The American Mathematical Monthly*, 127:4, 291–296.  
10.1080/00029890.2020.1712168

The title of the article is explained in the second paragraph. It is a typical Conwaysque game. Since the article was originally published in 1977, the application to Fermat’s Last Theorem (Wiles Theorem or Wiles-Taylor Theorem) was a nice touch. From the acknowledgement part we learn that “the paper has had a major impact on the early developments of epistemic logic in Amsterdam.”

### Response

I am greatly honored by this award from the MAA. The paper is most unusual in a variety of ways. You will already have noticed that the three co-authors are Conway, J.H., Paterson, M.S., and Moscow, U.S.S.R., but may not yet have seen the acknowledgments at the end of the paper.

John Conway and I worked on this problem, between sessions at the 1966 International Congress of Mathematicians in Moscow. I heard nothing more until John wrote essentially this paper for a Festschrift in Amsterdam in 1977. The acknowledgments say:

“The work described here was carried out when the first and second named authors enjoyed the hospitality of the third. The second and third authors are indebted to the first for expository details. The first and third authors gratefully remark that without the constant stimulation and witty encouragement of the second author this paper ... was completed”.

So with that understanding I can say what a great paper this is, combining John’s idiosyncratic wit and intellectual clarity. Other unusual aspects are the single reference, which is to the paper itself, and the order of presentation which begins with a disproof of the main theorem, then followed by the proof.

Sadly, John died last year but he was very pleased to be shown this article in the *Monthly* in hospital shortly before then.

### Biographical Sketches

**Mike Paterson** took degrees in mathematics at Cambridge and rose to fame as the co-inventor of *Sprouts* with John Conway. He evolved from president of the Trinity Mathematical Society to president of the European Association for Theoretical Computer Science, and migrated from MIT to the University of Warwick, where he has been in the computer science department for 50 years.

**John Horton Conway** was an English mathematician active in the theory of finite groups, knot theory, number theory, combinatorial game theory and coding theory. He also made contributions to many branches of recreational mathematics, most notably the invention of the cellular automaton called the *Game of Life*.