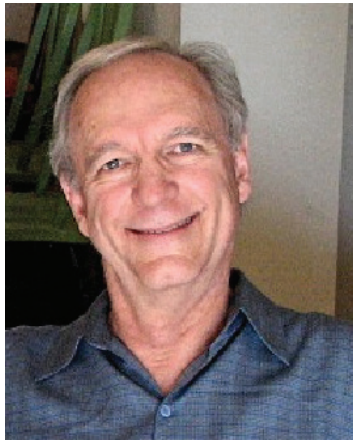


## Meet the Editors

BURTON VOORHEES



Burton Voorhees was born in Tucson, Arizona in 1942. His parents Paul and Suzanne Voorhees left Tucson in 1951 for Los Angeles where they settled in the San Fernando Valley. He graduated from high school in 1960 and enrolled in the University of California at Berkeley, majoring in physics. While there he was a member of the university swimming and water polo teams, wrote for the campus humor magazine, and held summer jobs as a lifeguard. He received an A.B. degree in physics in 1964 and continued on to an M.Sc. in physics from the University of Arizona in 1966, and a Ph.D. in physics from the University of Texas at Austin in 1971, specializing in general relativity theory where he is known for the Voorhees solutions of the Einstein equations. While in Austin he was introduced to the Moore method of teaching mathematics, which he has recently incorporated in a distance education course in number theory. He also became an avid bridge player, choosing an academic career over that of a bridge professional after realizing that he lacked the personality characteristics necessary for success as the latter.

His first academic appointment was as visiting assistant professor of physics and mathematics at Pars College in Tehran, Iran. This led to a life long interest in cultural differences in general and in Persian culture, and began his interest in collecting Persian rugs (his wife has told him that if he buys any more, they will have to go on the ceiling). It also led to an interest in the Afghan Sufi writer Idries Shah, whose work has strongly influenced much of his study outside the fields of physics and mathematics.

Following two years teaching in Iran, he returned to Austin to spend the summer of 1973 at the University of Texas Center for Relativity Theory before taking up a postdoctoral appointment in mathematics at the University of Alberta. There he branched out in research, working in mathematical biology and also working as a research assistant in the University of Alberta Center for Advanced Study in Theoretical Psychology, in which capacity he studied psychology, cultural psychology, and philosophy of science. In 1982 he was appointed as associate professor of mathematics at Athabasca University, Canada's premier distance education university. He became a full professor in 1987.

Also in 1987 he began work in the field of cellular automata and has become an international expert on additive cellular automata. More recently, he has worked with undergraduate students to develop simple simulation models of trade-off situations in complex systems; publishing papers on the trade-offs between stability and flexibility, and between quickness and accuracy of response in risk/reward situations. While correcting a typographical error in a textbook he was using to develop a course in evolutionary dynamics he became interested in the evolutionary dynamics of structured populations represented by directed graphs and developed a method for computation of fixation probabilities on directed graphs based on a simple system of linear equations. He retired at the end of 2014 and now lives with his wife Kinga in Victoria, British Columbia.

While in graduate school he discovered that the best place for serious work is a coffee shop and can be found most afternoons now in one of several near his home. He is currently working on several books, including a history of science from the perspective of cognitive science, and a book on the evolution of cooperation and altruism.

For recreation he travels, reads science fiction, swims, plays poker, tournament bridge, and spends far too much time on the internet. He has also begun a long-term project to paraphrase the Rubaiyat of Omar Khayyam in limerick form.

See all those bright well-educated guys  
Who give us answers to the hows and whys,  
Talk of this, talk of that  
Never stepping up to bat  
Nor sharing secrets of becoming wise.

The desert sands absorb the rivers flow  
Those sparkling waters long ago were snow.  
Now evaporation's  
The current relation,  
As onward with the wind they quickly go.

And the marsh that's left behind, well you know...  
Many good ideas will come and go  
Each one in its time  
Was thought most sublime  
But got histories irreverent Heave Ho.

### **SAMPLE PUBLICATIONS:**

- [1] B. H. Voorhees, 1995, *Computational Analysis of One Dimensional Cellular Automata*. Singapore, World Scientific.
- [2] B. Voorhees, 1999, Gödel's theorem and strong AI: Is reason blind? In *Metadebates on Science*, Gustaaf C. Cornelis, Sonja Smets, & Jean-Paul van Bendegem (eds.) Dordrecht: Kluwer. 43 – 62.
- [3] B. Voorhees, 2004, Embodied mathematics. *Journal of Consciousness Studies* 11(9)
- [4] B. Voorhees, 2014, Two conceptual models for aspects of complex system behavior. In *How Nature Works*, I. Zelinka, A. Sanayei, H. Zenil, & O.E. Röessler (eds.). Berlin, Springer. 101 – 130.
- [5] B. Voorhees & R. Bergerud, 2015, Simple graph models of information spread in finite populations. *Royal Society Open Science* 2, DOI: 10.1098/rsos. 150028, 20 May 20.