

Meeting: 1003, Atlanta, Georgia, MAA IPS Z3, MAA Invited Paper Session on Worlds of Interactive Mathematics, Part II: The Legacy of James E. White

1003-Z3-397 **Dan Kalman*** (kalman@american.edu), Department of Mathematics and Statistics, American University, Washington, DC 20016-8050, and **Gerald J Porter**, Department of Mathematics, David Rittenhouse Lab., 209 South 33rd Street, Philadelphia, PA 19104-6395. *James White's Work.*

James White was a visionary mathematician, computer scientist, and educator. He developed his Mathwright family of software tools in order to harness the power of the computer in the service of mathematics learning. Here, the distinction between *learning* and *teaching* is intentional. White was a student of the psychology of learning, and read deeply in that field. His belief in constructivist learning models, informed by both scholarship and personal experience, inspired his fundamental goal: to provide students opportunities for actively exploring mathematical concepts. In particular, he wanted teachers to be able to build computer environments that provided students with such experiences. The software is not supposed to *teach* mathematics, but it is supposed to let the user *learn* mathematics. In this presentation, we will highlight the many accomplishments of James White in connection with these ideas. (Received September 13, 2004)