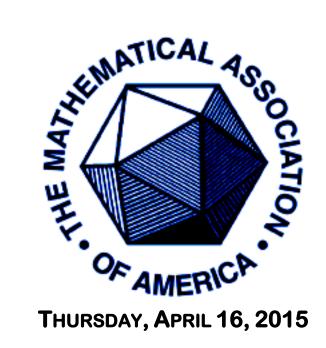


**FRAMINGHAM STATE UNIVERSITY** 100 State Street, P.O. Box 9101 Framingham, MA 01701-9101 THIRTEENTH ANNUAL NORTHEASTERN SECTION OF THE MATHEMATICAL ASSOCIATION OF AMERICA (NES/MAA) PRESKENIS LECTURE

IN SEARCH OF INFINITY JAMES E. BRENNAN UNIVERSITY OF KENTUCKY



**Abstract:** "The infinite! No other question", declared David Hilbert, "has ever moved so profoundly the spirit of man." Without assuming any specialized knowledge of the audience, it is my goal to lay the foundation for a deeper understanding of Hilbert's remark by engaging in a conversation around some of the paradoxes associated with the concept of infinity. The most famous are perhaps Zeno's paradoxes of motion which are still being debated today. On the other hand, one of the works in the Aristotelian corpus, known as Mechanica, contains a problem which attracted wide attention at an earlier time, but is now hardly mentioned. That is the problem of Aristotle's Wheel, which is exemplified in something as ordinary as a common rolling pin. Nevertheless, more than two millennia after its inception, the problem surrounding the Wheel played a central role in Galileo's greatest work, Dialogues Concerning Two New Sciences, published in 1638. The occasion in the Dialogues prompting a discussion of the Wheel is a question as important as the ultimate constitution of matter. After examining a few seemingly paradoxical ideas and noting their impact in the long history of thought, I hope that by evening's end you can, with William Blake, begin

> *to see a World in a Grain of Sand and a Heaven in a Wild Flower, Hold Infinity in the Palm of your Hand and Eternity in an Hour.*

A dedicated teacher committed to excellence, a serious scholar, a popular son of South Boston, and a gentleman, Ken Preskenis had a passion for mathematics and for sharing that love with others, especially, youngsters. He joined the faculty at Framingham State University in 1977 after teaching at Newton College and then at Boston College for a total of 14 years. Ken was the author of a number of articles in analysis and mathematics education, a regular attendee and contributor at NES/MAA meetings, a South Boston Athletic Hall of Famer, and a recipient of the Michael E. Glynn South Boston Community Service Award. The Kenneth J. Preskenis Scholarship Fund has been established in his memory at Framingham State University.

## We thank

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## and

• Office of Campus Events for making the reservations, arrangements, and set-up for the reception and Dr. Brennan's presentation.

Please join us again next year for the *Fourteenth* Annual NES/MAA Preskenis Lecture.