Inagural Johnny Houston Lecture Series

Thursday, February 9, 2023

3:30 p.m.
LWSN 1142

Reception at 6pm at the Black Cultural Center

Investigating-Visualizing Infinity in Finite Space

In this talk, we will learn how Dr. Houston initially became interested in infinity, mathematical infinity, computational science and fractals. He will begin with a great challenge of the Pythagoreans {Pythagoras (580 BC-500 BC) and his followers}, followed by a definition of infinity, and a brief history of infinity/mathematical infinity. The German mathematician Georg Cantor (1845-1918) began, in 1873, to investigate infinite sets, very rigorously. Dr. Houston shares some of the important work of George Cantor on infinity/infinite sets and continues with some of the current challenges of how to better understand mathematical infinity today. He then introduces the definition of a fractal, first showing how nature introduced the "concept of a fractal" to mankind. However, it was the French mathematician, Benoit Mandelbrot (1924-2010), who introduced the name and definition of a mathematical fractal in 1975. The major focus of the presentation will be the investigation and examination of properties of some mathematical fractals as dynamical systems and visualizing their images – chaos, in finite space.
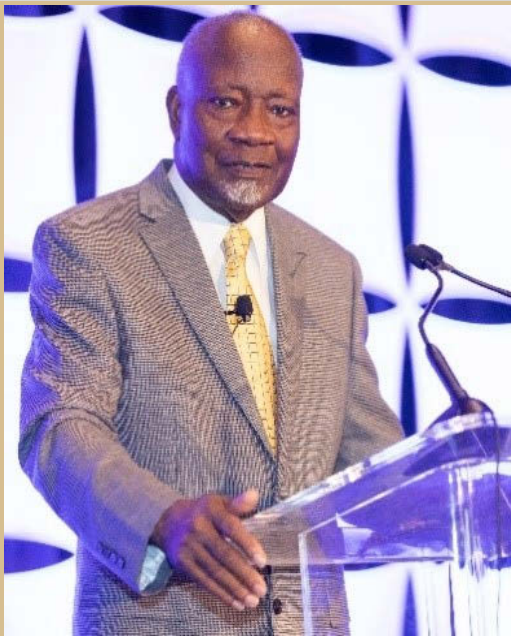
Dr. Johnny L. Houston

Johnny Houston Lecture Series Namesake
PhD - Purdue University
Professor Emeritus - Elizabeth City State University
Previous Executive Secretary Emeritus - NAM Co-Founder of NAM
Ex-Officio NAM Board Member

Dr. Houston received his PhD in Mathematics at Purdue University in 1974, after earning a BS at Morehouse College and an MS at Atlanta University (now Clark Atlanta University). In 1969 he was one of the founders of Purdue's Black Cultural Center. That same year he was one of the founding members of the National Association of Mathematicians (NAM), a professional society promoting excellence in the mathematical sciences among underrepresented minority groups, and in particular African-Americans. Dr. Houston served as the Executive Secretary of NAM from 1975 until 2000. Dr. Houston's first postdoctoral position was at Atlanta University, after which he became the Calloway Professor of Computer Science at Fort Valley State. In 1984 he became Vice Chancellor of Academic Affairs at Elizabeth City State University (ECSU), and was named a Senior Research Professor of Mathematics and Computer Sciences at ECSU in 1988. He received the 1999 NAM Lifetime Achievement Award.

Please register for the lecture and reception using the QR code or link below! (Not required to attend)

https://purdue.ca1.qualtrics.com/jfe/form/SV_1Zx28CqUpkKB6Qe

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