The 2019 James L. Solomon, Jr. Recognition Lecture
(Special Event)

The Beauty, Joy, and Power of Mathematics: STEM-PS

JOHNNY L. HOUSTON, Ph.D.

The presenter will share with the audience an overview of how mathematicians and scholars usually provide a broad description of the discipline of mathematics. He will then explain his definition of the acronym STEM-PS: STRATEGIES THAT ENGAGE MINDS IN PROBLEM SOLVING. Next he will illustrate a variety of investigations which show how STEM-PS works in mathematics in high school, in college, in graduate school and post-doctoral research in the discipline of mathematics. Emphasis will be placed on mathematical investigations that are often pursued based on “THE WHAT IF QUESTION?” Near the end, there will a discussion of African American Mathematicians, prior to 1960, during the modern Civil Rights era (1960-1975), the time in which the presenter and Mr. Solomon were undergraduate and graduate students of mathematics. The presentation will end with a brief discussion of the current state of African Americans Mathematicians, the National Association of Mathematicians (NAM) and the larger mathematical sciences community in the USA.