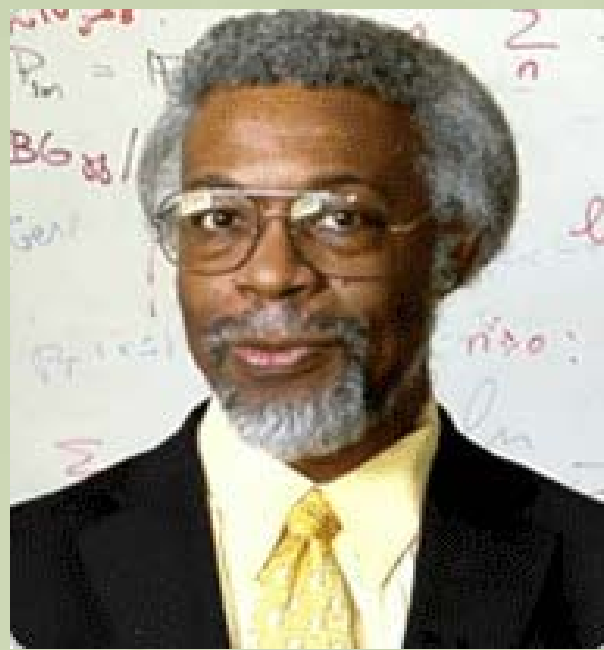


**Center for Applied Mathematical Sciences  
Distinguished Lecturer, Spring 2015**



**Sylvester James Gates, Jr.**

**Distinguished University Professor, University System of Maryland Regents Professor,  
John S. Toll Professor of Physics, and Center for String & Particle Theory Director**

**How Attempting To Answer A Physics Question Led Me to Graph Theory,  
Error-Correcting Codes, Coxeter Algebras, and Algebraic Geometry**

Abstract:

We discuss how a still unsolved problem in the representation theory of Superstring/M-Theory has led to the discovery of previously unsuspected connections between diverse topics in mathematics.

**Monday, January 26, 2015**

**USC Dornsife  
Kaprielian Hall**

**Tea: 3:00 p.m.  
KAP 410**

**Lecture: 3:30 p.m.  
KAP 414**

**Wine & Cheese: 4:30 p.m.  
KAP 410**

**CAMS Director:  
Susan Friedlander  
[susanfri@usc.edu](mailto:susanfri@usc.edu)**

Jim Gates received his SB and PhD degrees from MIT. He is presently a Distinguished Professor of Physics at the University of Maryland.

His research interests include string theory, supersymmetry, supergravity, Adinkra symbols as representations of supersymmetric algebras, and superstring/M-theory.

He is a member of the National Academy of Sciences, the American Philosophical Society, and the American Academy of Arts and Sciences. He was awarded the Klopsteg Memorial Award in 2003 and the National Medal of Science in 2013.

He serves on President Obama's Council of Advisors on Science and Technology.