

The Department of Mathematics presents the

Dr. Marjorie Lee Browne Colloquium

as part of the University of Michigan's
Rev. Dr. Martin Luther King, Jr. Symposium



Dr. Juan Meza

Head of the High Performance Computing Research Center
Lawrence Berkeley National Laboratory

I Want to Be a (Computational) Mathematician

Twenty years ago Halmos wrote a wonderful book entitled *I Want to Be a Mathematician*, describing his life as a mathematician, while also giving us a history of mathematics from the 1930s to the 1980s. I read his book while in graduate school and delighted in the stories and his perspectives on life as a mathematician. In this talk, I'd like to give my own perspective, beginning when I became interested in mathematics as an undergraduate to today, focusing on some recent work on new algorithms, massively parallel computers, and the application of both to some of today's most challenging problems. This combination of mathematics with computers has given rise to the field of computational mathematics, which has helped to advance computational science to the point that many people today now view it as the third pillar of science alongside experiments and theory. I will give examples of the power of computational mathematics drawn from my personal experiences and explain how mathematics amplifies scientific research. I will conclude with some thoughts on the future of computational and applied mathematics and what I see as the challenging new opportunities for helping science and society as a whole.

Monday, January 21, 2008
4:00 p.m. • Room 1360 East Hall
530 Church Street, Ann Arbor, MI
Reception to follow in the Mathematics Atrium

The Colloquium honors Dr. Marjorie Lee Browne, the first African-American woman to earn a Ph.D. in Mathematics from the University of Michigan.

For information please contact the Math Department at (734) 764-0335 or see www.math.lsa.umich.edu/mlk/