CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, October 30 2:00 – 3:00 PM Maria Sanford, Room 101

QUANTUM MECHANICS AND THE MANY BODY PROBLEM

JUAN J. OMISTE AARHUS UNIVERSITY, DENMARK

<u>Abstract:</u> Quantum mechanics has been implied one of the most important revolutions in Physics in the last century together with the Restricted and General Relativity. In this talk, I will explain its historical origin due to Planck, Einstein, de Broglie, Schrödinger and Heisenberg, among many others. Then, I will continue describing its mathematical formulation and some of the main phenomena described by the quantum theory. Finally, I will introduce the many body problem in Quantum mechanics, paying special attention to the understanding of the physics of atoms and molecules. In particular, I will show briefly my research on ultrafast processes in atoms at Aarhus University.

For further information: <u>gotchevi@ccsu.edu</u> 860-832-2839 http://www.math.ccsu.edu/gotchev/colloquium/