



**Old Dominion University
Department of Physics**

Special Colloquium

Tuesday, July 8, 2014

"Factorization Theorems and Proton Structure: from one to three dimensions"

**Dr. Ahmad Idilbi
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Abstract: The proton, as we all know, is one of the most fundamental elementary particles in nature. The theory of strong interactions, quantum chromodynamics (QCD), governs the internal structure of the proton in particular and all hadrons in general. In my talk I will review the notion of factorization theorems from effective field theory point of view. Those theorems play a fundamental role both in high-energy physics as well as in providing us a vital tool to unravel the complicated inner structure of the proton. I will review some aspects of the recent developments in the latter issue and the theoretical complications arising when we try to probe the proton's three-dimensional structure and its spin decomposition".

Presentation: **OCNPS 200 @ 11:30 am**

Refreshments: **OCNPS Atrium @ 11:00 am**

All interested persons are cordially invited to attend.