Math Physics Seminar - Trung Vu, Yale University, SCHM 316

Location: SCHM 316

Time: Wed, March 12, 1:30 PM - 2:30 PM

Title: De Concini-Kac quantum groups at roots of unity revisited

Abstract: Quantum groups were introduced by Drinfeld and Jimbo in mid 1980's. Soon after, quantum groups became a subject of great interest and revealed deep connections with many areas of mathematics and physics, in particular, representation theory. In this talk, we will discuss some aspects of representation theory of quantum groups at roots of unity, in particular, the De Concini-Kac form of quantum groups. This form has been studied in the series of papers by De Concini-Kac-Proseci around 90's in the case when the order of the roots of unity is odd. We will discuss our modification to the De Concini-Kac form to deal with the case when the order of roots of unity is even. This is a joint work with Ivan Losev and Alexander Tsymbaliuk.