### **CCSU** DEPARTMENT OF MATHEMATICAL SCIENCES

# COLLOQUIUM

#### Friday, October 29 2 – 3 PM Maria Sanford, Room 101

#### PLETHYSMS OF SYMMETRIC POWERS

## MICHAEL KLUCZNIK

#### **CENTRAL CONNECTICUT STATE UNIVERSITY**

**Abstract**: A fifty year old conjecture by Foulkes states that there is a GL(V) linear embedding of Sa(SbV) into Sb(SaV) for a  $\leq$ b. This has long since been proven for the case a=2. I will talk about highest weight vectors in these cases and relate these to double cosets for a particular wreath product as a subgroup of a symmetric group.

(Except for the discussion of the wreath product (which is elementary but confusing), the talk should be accessible to anyone with knowledge of linear algebra).

*For further information:* <u>gotchevi@ccsu.edu</u> 860-832-2839 <u>castanedan@ccsu.edu</u> 860-832-2851