Department of Mathematics and Statistics

COLLOQUIUM
Tuesday, March 25, 2014

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A cellular quotient of the Temperley--Lieb algebra of type D

Abstract: The Temperley--Lieb Algebra, invented by Temperley and Lieb in 1971, is a finite dimensional associative algebra that arose in the context of statistical mechanics. Later in 1971, R. Penrose showed that this algebra can be realized in terms of certain diagrams. Then in 1987, V. Jones showed that the Temperley--Lieb Algebra occurs naturally as a quotient of the Hecke algebra arising from a Coxeter group of type A (whose underlying group is the symmetric group). This realization of the Temperley--Lieb Algebra as a Hecke algebra quotient was generalized to the case of an arbitrary Coxeter group. In this talk, I will summarize the work I did for my MS thesis, which focuses on the Temperley--Lieb algebra of type D. In particular, we will explore the diagrammatic representation of this algebra and discuss a particular quotient that turns out to be "cellular."

4:00 – 5:00 pm
Adel Mathematics Bldg., Room 164
(refreshments at 3:45)

ACGT Seminar:
Tuesday, March 25, **11:20 – 12:20 pm**, AMB 221. Speaker: Michael Falk (NAU),
Title: The poset of pairs in a Coxeter group, and the Charney-Davis conjecture (continued).

Applied Math Seminar (AMS)
Thursday, March 13, 12:45 – 1:35 pm, AMB 224. Speaker: Jim Swift, Title: The rate of convergence of Ridders' method.

Friday Afternoon Undergraduate Mathematics Seminar (FAMUS):
Friday, March 28, 3:00 – 4:00 pm, AMB 164
Speaker: TBA, Title: TBA, Faculty guest: NA

Special Department Colloquium:
Friday, March 28, 4:15 – 5:00 pm, AMB 164
Speaker: Kirk Trigsted, University of Idaho,
Title: 13 Years of Course Redesign at the University of Idaho