

VCU Discrete Mathematics Seminar

Introduction to honeycombs

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Tuesday, April 12
12:30-1:20
4145 Harris Hall

The Littlewood-Richardson (LR) numbers are fundamental quantities appearing in representation theory and geometry. There is currently no formula for computing the LR numbers, or even a general criterion for determining whether a LR number is nonzero. However, there are multiple combinatorial interpretations of the LR numbers, each of which provide their own unique insight into the computation of, and relations between, LR numbers.

Honeycombs provide an interpretation of the LR numbers that is both geometric and combinatorial. This interpretation was used by A. Knutson, T. Tao, and C. Woodward to construct elegant proofs of the long-standing Saturation Conjecture and Horn's Conjecture. In this talk, we will briefly discuss LR numbers, define honeycombs, and compute some LR numbers using honeycombs.



For the DM seminar schedule, see:

<http://www.people.vcu.edu/~dcranston/DM-seminar/>