BI-CO MATHEMATICS COLLOQUIUM

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"What is a Crystal?"

Monday, November 10, 2014

Talk at 4:00 – H109
Tea at 3:30 – KINSC Math Lounge, H208

Abstract:
The interplay between representation theory and combinatorics has been studied for many years. A more recent development in this connection is the notion of a crystal, due to Kashiwara, which may be represented as a colored, directed graph, with Young tableaux as its vertices. My goal is to give a brief introduction to crystals and explain why they're useful. As an application, we will explain how this Young tableaux realization of the crystal $B(\infty)$ applies to a important product appearing in different areas of mathematics.

Note: I will try to make it so that the only prerequisite for this talk is linear algebra.

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