

BI-CO MATHEMATICS COLLOQUIUM

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“An injective proof of strong q -log-convexity for Bell polynomials”

Monday, February 2, 2009

Talk at 4:15 – KINSC H109
Tea at 4:00 – KINSC Math Lounge, H208

Abstract: The Bell numbers B_n count the number of partitions of an n -set. Bell polynomials are a q -analogue of Bell numbers which count set partitions by their number of blocks. While it has been known for some time that Bell numbers are log convex, a simple case of q -log-convexity for Bell polynomials was proved in 2006 by Liu and Wang. This summer has seen the proof of the general case by Chen, Wang and Yang using methods similar to Liu and Wang. Here we take the approach of Butler and Flanigan to give an injective proof of the result.

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