



AMERICAN UNIVERSITY  
WASHINGTON, D C

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THE DEPARTMENT OF MATHEMATICS AND STATISTICS COLLOQUIUM

# Inference Based on Spacings

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3:30 p.m. on Tuesday, March 25<sup>th</sup>

Ward 105

**Abstract:** A new method of estimating parameters using "spacings" or gaps between ordered observations will be discussed. It will be shown that the estimators so obtained are consistent and asymptotically normal. The best estimator in this class will be shown to have asymptotic properties similar to the MLE, yet not suffer from some of the problems faced by the latter. The role of spacings in testing for goodness-of-fit will also be discussed. Small sample asymptotics will be used to approximate the distributions of some statistics based on uniform spacings.

*Presented by*  
THE AU MATH/STAT DEPARTMENT AND THE AU CHAPTER OF SIGMA XI  
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Next Colloquium:

**Tuesday, April 1, 2003** Ward 105

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**I-Lok Chang**, American University  
*TBA*

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