



Speaker: Clifford Smyth
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Wednesday, December 14, 2011
3:00 PM
127 Hayes-Healy Hall

Title: Correlation inequalities and the BKR inequality

Abstract:

Correlation inequalities are theorems giving conditions on when certain classes of events (or random variables) are positively (or negatively) correlated. Perhaps one of the most well-known is the FKG inequality which asserts the positive correlation of increasing random variables on finite distributive lattices as long as the probability measure obeys the positive lattice condition. The BKR inequality is another well-known correlation-type result with important applications in percolation. The BKR inequality is phrased on product spaces but recently we have found a generalization to finite distributive lattices.