Special
APPLIED MATHEMATICS COLLOQUIUM

NOISY SORTING WITHOUT RESAMPLING

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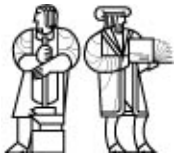
ABSTRACT:

Sorting using pairwise comparisons is one of the most fundamental algorithmic problems. An important variant of the problem is sorting in the presence of noise and inconsistency. We survey some known positive and negative results on the subject. We then present our recent work on sorting using noisy pairwise comparisons where resampling of comparison results is not allowed. We prove a probabilistic structure theorem on the problem and use it to give the first efficient algorithm for Noisy Sorting Without Resampling.

THURSDAY, FEBRUARY 21, 2008
2:30 PM
Building 4, Room 370

(Reception at 3:30 PM in Building 2, Room 349)
(Applied Math Common Room)



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