SCUOLA
NORMALE
SUPERIORE
PISA

SEMINARIO DI MATEMATICA

giovedì 3 maggio 2007
ore 15.00

Scuola Normale Superiore
Pisa
(Aula Dini)

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Terrà un seminario dal titolo:

"Improving (Web) Search with the Riemann Zeta Function"

Abstract

Consider the following seemingly simple geometric task: Given a set of points S in a metric space and a point q, compute the k points from S that are closest to q. The problem is to find an efficient algorithm for this task. This algorithmic problem, known as k-nearest neighbours, is very challenging and central to contemporary research in web search and information retrieval in general. We will discuss some simple, and yet very effective, randomized algorithms for this problem. Our discussion will highlight once again the "unreasonable effectiveness" of Mathematics. One of the most revered objects of Mathematics, the Riemann zeta function, together with "non constructive" properties such as compactness of closed sets will come to the rescue to solve this eminently practical problem and lead to real, efficient and effective algorithms.

Tutti gli interessati sono invitati a partecipare.

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