

Einladung zum Vortrag

am

**Dienstag, den 26.02.2008 um 14.00 Uhr
im Raum 307 (Robert-Mayer-Str. 11-15)**

hält

Herr Dr. Nobert Zeh

Dalhousie University
Canada

einen Vortrag mit dem Titel:

Optimal Cache-Oblivious Red-Blue Line Segment Intersection

Zusammenfassung:

Cache-oblivious algorithms aim to minimize the number of cache misses caused by memory accesses made by the algorithm. We present such an algorithm for the red-blue line segment intersection problem that incurs the optimal number of cache misses up to constant factors. Given two sets R and B of segments such that the segments in each, R and B , are pairwise non-intersecting, the red-blue line segment intersection problem asks to find all intersections between segments in R and segments in B . The cost of our algorithm is $O(\text{sort}(N) + T/B)$ block transfers between cache and main memory, where $N = |R| + |B|$, $\text{sort}(N)$ denotes the number of block transfers necessary to sort N segments, T is the number of intersections reported, and B is the cache block size.

This is joint work with Lars Arge and Thomas Moelhave from University of Aarhus.