

EINLADUNG

Zeit: Donnerstag, 24. November 2005, 16.30 Uhr

Ort: AH I, Ahornstr.55

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Titel: “Scalability of Trace-based Performance Analysis”

Abstract:

The development of parallel applications requires appropriate optimization tools to make efficient use of modern supercomputing architectures. A powerful and widely-used method for analyzing the performance behavior of parallel programs is event tracing. While enabling the identification of performance problems on a high level of detail, escalating trace-file size often constrains its applicability on large-scale systems. This affects all aspects of trace analysis ranging from collection of trace data to visualization of results.

Although the scalability of trace-analysis tools has been increased in the past, their capacity does not extend to present and future architectures with very large processor numbers and applications running on at least a major fraction of them.

This talk discusses current approaches to raise the scalability limit including automatic pattern search, interactive parallel visualization, and trace-data compression. It identifies open research questions and introduces a new concept based on parallel pattern search utilizing the entire allocation of processors reserved to execute the target application.

Es laden ein: Die Dozenten der Informatik