

PROBLEM SOLVING ENVIRONMENT (PSE) IN SCIENTIFIC COMPUTING

TRACK NUMBER (1400)

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Key words: Problem Solving Environment, Scientific Computing Environment, Computer Assisted Scientific Computing.

ABSTRACT

Problem Solving Environment (PSE) is an emerging scientific and technological active area in computing science. PSEs provide innovative computational facilities for easy incorporation of novel solution methods to solve a target class of problems in computing environments, distributed and heterogeneous resources, and collaborative environments.

Key issues addressed in this mini-symposium include PSE for Cloud environment, PSE for collaborations, PSE for heterogeneous distributed system management, PSE for application developments, PSE for scientific computing and PSE for education, as well as PSEs for eScience-relating issues.

PSEs provide computational facilities to solve target problems in the novel way in the fields presented above. For example, Cloud and distributed systems are complicated, and contain huge information systems including heterogeneous computer hardware resources, application software, middleware, experimental instruments, and so on. The PSEs are facilities to help users work on the complicated systems. The PSE researches and technology have been intensively explored, and at present the PSEs have started to realize the PSE dream.

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