

Workshop Description:

High-performance computing is and has always been performance oriented. However, a consequence of the push towards maximum performance is increased energy consumption, especially at supercomputing centers. Moreover, as peak performance is rarely attained, some of this energy consumption results in little or no performance gain. In addition, large energy consumption costs supercomputing centers a significant amount of money and wastes natural resources.

The main goal of this workshop is to provide a timely forum for the exchange and dissemination of new ideas, techniques, and research in power-aware, high-performance computing. HP-PAC will present research that reduces (1) power, (2) energy consumption, or (3) heat generation, with little or no performance penalty. This workshop differs from other power-aware workshops in that it is specifically interested in saving energy in large scale, scientific applications, rather than in small mobile devices.

Topics of interest include:

- Novel power-aware architectures for HPC
- Power-aware middleware for HPC
- Power-aware runtime systems for HPC
- Reduced power/energy/heat algorithms & applications
- Surveys or studies of power/energy/heat usage of HPC applications

Workshop Co-chairs:

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Padma Raghavan, Pennsylvania State University, USA

Program Committee:

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