

Minisymposium Announcement



Applications and methods of GPU, manycore and heterogeneous systems

Abstract deadline: **December 31, 2011**

Since the last WCCM (Sydney 2009), where we organized a similarly themed minisymposium, the scientific and engineering communities have gained much experience in using GPU hardware for their applications. The number of publications addressing GPU applications has skyrocketed, while researchers have developed much common understanding of how to implement numerical methods in this architecture. Moreover, we now find that three of the five fastest computers in the world, as measured for the Top500 list, are GPU-based systems. There is much conversation about GPUs playing a leading role in the exascale computing world. In summary, this topic is of wide interest; frankly, it is all the rage.

This minisymposium will concentrate presentations from the top researchers in the world using GPU hardware for applications in all branches of computational mechanics. We encourage contributions that address innovative methods to use GPUs efficiently, studies in numerical methods as they apply to adapting to the hardware and perspectives on the future of GPUs as we advance toward exascale.

Organizers:

Takayuki Aoki, Tokyo Institute of Technology

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