

Advances in BEM/Fast BEM

A Minisymposium at the
APCOM'07/EPMESC XI

Kyoto, Japan, 3 – 6 December, 2007

A minisymposium on *Advances in BEM/Fast BEM* is being organized for the Third Asian-Pacific Congress on Computational Mechanics (APCOM'07) in conjunction with Eleventh International Conference on Enhancement and Promotion of Computational Methods in Engineering and Science (EPMESC XI) to be held in Kyoto, Japan, 3 – 6 December, 2007. This symposium will bring together researchers from academia, government research laboratories, and industries to discuss the recent progresses in the development of the boundary integral equation and boundary element methods (BIE/BEM) with special attention to fast algorithms. Contributions from mathematical and computational researchers are also considered. Topics covered will include, but are not limited to:

- Fast boundary element methods (e.g., FMM, wavelets, matrix compression techniques, etc.);
- Mathematical aspects of BIE/BEM;
- Computational issues (e.g. parallel implementations, iterative solvers, preconditioning, etc.)
- Large-scale, multi-scale and multi-physics analyses using the BIE/BEM;
- Efficient coupling of the BEM with other methods;
- Modeling of materials (e.g., MEMS, composites, functionally graded materials, and others);
- Wave propagation;
- Fracture mechanics;
- Biomedical/bioengineering problems;
- New formulations (e.g., boundary meshless methods, method of fundamental solutions);
- Software development and industrial applications.

To participate in this minisymposium, please submit an abstract through the Congress website: <http://www.apacm.org/apcom07-epmescXI/>. More information about the Congress can also be found at this website.

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