

submitted November 1, 2007 by Professor Choi-Hong LAI, University of Greenwich - Maritime Greenwich Campus, Great Britain.

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Title : Innovative numerical algorithms for multi-scale industrial problems

Abstract

The proposal concerns the building of a network of expertise, a series of workshops and schools, and a number of exchange visits between key institutions involving an enlarged number of and a wider research groups based in the EU. The area of expertise and interests concerns the research and development of innovative numerical algorithms for multi-scale industrial problems. There are two prime concerns of this proposal. First investigate and extract intrinsic distributed computational properties using a suit of multi-scale industrial problems. Second examine the use of internet and the Grid computing facilities for the suit of industrial problems. It is intended to provide a number of stimulating workshops to be organised at the collaborating institutions in a rotation manner to disseminate important research experience to post-graduate students and post-docs from a wider academic institutions across EU and to industrial practitioners. Many exchange visits will be arranged for post-graduate students and post-doctoral researchers as well. Research reports, workshop proceedings and journal special issues will be used to report events and research results.