## **Call for Papers**

## Special Issue on "Exact & Parameterized Computation – Moderately Exponential & Parameterized Approximation"

Manuscripts are solicited for a special issue in the journal "Theoretical Computer Science" (TCS) on "Exact & Parameterized Computation – Moderately Exponential & Parameterized Approximation"

The design and analysis of Exact Algorithms for NP-hard Problems with Moderately Exponential Worst-Case Running-Times has become a very active area in Theoretical Computer Science and Combinatorial Optimization and motivates intensive research in both domains. On the other hand, Moderately Exponential & Parameterized Approximation has been developed quite recently as a research programme aiming at bringing together Exact Computation and Polynomial Approximation and at remedying to the numerous inapproximability results, the Polynomial Approximation paradigm suffers.

With this Special Issue, we wish to foster research in the areas of Exact Computation and Moderately Exponential Approximation as well as to their intersection by exposing new results and directions for further research and to contribute to the development of further scientific links between them.

Potential topics include (but are not limited to) the following:

- Moderately exponential algorithms for NP-hard problems
- Parameterized algorithms
- New tools for exact computation
- Hardness in fixed parameter computation
- Moderately exponential and/or parameterized approximation algorithms for NP-hard problems
- Structure in moderately exponential and/or parameterized approximation
- New tools for exponential or parameterized approximation
- Relations between polynomial approximation and parameterized computation
- Probabilistic techniques in exponential approximation

Submissions must be received before December 31, 2011. To ensure that all manuscripts are correctly identified for inclusion into the special issue, it is important that authors select

## "Article Type SI:Exact&Parameterized Computation(VP)"

when they reach the step in the submission process.

Papers will be refereed according to the standards of TCS.

We will do our best to have the refereeing procedure timely finished. Please contact the guest editor for additional information.

Guest Editor Vangelis Th. Paschos LAMSADE, CNRS and Université Paris-Dauphine Institut Universitaire de France