Call for Papers

Special Issue on "Theory and Applications of Graph Searching Problems"

Manuscripts are solicited for a special issue in the journal "Theoretical Computer Science" (TCS) on "**Theory and Applications of Graph Searching Problems**". This special issue will be dedicated to the 60th birthday of **Lefteris M. Kirousis**.

Graph searching is often referred to, in a more playful language, as a pursuit-evasion game. This is a kind of game where one part is a set of evaders, that hide in a graph representing a network, and the other part is a number pursuers, that move systematically in the graph. The game may vary significantly according to the capabilities of the evaders and the pursuers. The objective of the game is to capture the evaders in an optimal way, where the notion of optimality itself admits several interpretations. The area of Graph Searching has become a very active research area in theoretical computer science and discrete mathematics, with impact and applications in various domains.

With this Special Issue, we wish to foster research in the area by exposing new results and directions for further research. The purpose of the issue is to put together various recent results related to Graph Searching both from the applied and the theoretical point of view. Potential topics include (but are not limited to) the following:

- *Graph Searching and Logic*
- *Graph Parameters Related to Graph Searching*
- *Graph searching and Robotics*
- *Conquest and Expansion Games*
- *Database Theory and Robber and Marshals Games*
- *Probabilistic Techniques in Graph Searching*
- *Monotonicity and Connectivity in Graph Searching*
- *New Variants of Graph Searching*
- *Graph Searching and Distributed Computing*
- *Graph Searching and Network Security*

Submissions should be made in PDF format using the standard TCS submission system at http://ees.elsevier.com/tcs/ (doing author login).

To ensure that all manuscripts are correctly identified for inclusion into the special issue you are editing, it is important that authors select **SI TCS-A: Graph Searching (Thilikos)** when they reach the "Article Type" step in the submission process.

Submissions must be received before **July 31, 2011**.

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 editors for additional information.

Guest Editors
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