JGAA Special Issue on Graph Drawing Beyond Planarity: Call for Papers

Dear Graph Drawers,

It is a great pleasure to invite you to submit a paper to the Special Issue of Journal of Graph Algorithms and Applications (JGAA) on Graph Drawing Beyond Planarity.

Beyond planarity is a new research direction in Graph Drawing, which is currently receiving increasing attention. Its primary motivation stems from recent cognitive experiments showing that the absence of specific kinds of edge-crossing configurations has a positive impact on the human understanding of a graph drawing. Graph drawing beyond planarity is concerned with the study of non-planar graphs that can be drawn by locally avoiding specific edge-crossing configurations or by guaranteeing specific properties for the edge crossings. In this context, several classes of "beyond-planar graphs" have been introduced and studied, e.g., k-planar graphs, k-quasi planar graphs, right-angle-crossing graphs, fan-planar graphs, and fan-crossing free graphs. These classes of graphs have been mainly studied both in terms of their combinatorial properties and in terms of algorithms able to recognize and draw them.

The proposed special issue aims at covering a wide range of topics that are concerned with aspects of graph drawing and network visualization beyond planarity. The range of topics includes (but is not limited to):

- combinatorial aspects of beyond-planar graphs

- relationships between classes of beyond-planar graphs

- characterizations and recognition algorithms for classes of beyond-planar graphs

- algorithms that produce drawings with controlled edge-crossing configurations

- design and evaluation of models and interfaces for real-world networks.

Other topics that are not listed but that might be of interest for the study of beyond-planar graphs will also be evaluated.

PAPER SUBMISSION: We invite authors to submit papers describing original research of theoretical or practical significance to graph drawing beyond planarity until the 10th of May, 2017. We aim for a fast reviewing process in order to have this special issue available within 2017. Papers should be submitted to the editors of the special issue in PDF format. All communications between the editors, authors, and reviewers will be done by email, unless otherwise requested by the author or reviewer. All submissions must be formatted using the LaTeX style file of Journal of Graph Algorithms and Applications (`http://jgaa.info/authors.jsp`). The default margins and fonts must not be modified. The submission should contain a scholarly exposition of ideas, techniques, and results, including motivation and a clear comparison with related work. The claims of the paper should be fully substantiated, including full proofs or appropriate experimental data. Papers of good quality that do not fit within the scope of this special issue might be handled as regular JGAA submissions.

SUBMISSION DEADLINE: May 10, 2017.

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