

## Special Issue on Mathematical Methods in Biomedical Imaging 2014

### Call for Papers

Biomedical imaging is a rapidly development field to provide a state-of-the-art tool for preclinical biomedical research and clinical applications, in view of its ability to noninvasively reveal subtle structural variations of biological tissues and visualize in vivo physiological and pathological processes at the cellular and molecular levels. The main focus of this special issue will be on the interface between mathematical methods and biomedical imaging especially novel imaging theories, models, and reconstruction algorithms raised in biomedical imaging. It is also interesting to have quantitative comparison and analysis of new image processing methods for a specific clinical problem. Computational methods used to predict photon propagation in the optical imaging are welcome. In addition, innovative imaging system development and applications would be of great interest. This special issue will construct an international platform and serve as a forum for researchers to summarize and discuss recent advances in the biomedical imaging. Potential topics include, but are not limited to:

- Computational methods in biomedical imaging
- Reconstruction methods of CT, MRI, SPECT, and optical tomography
- Novel reconstruction methods in optical molecular imaging
- Phase-contrast imaging
- Photon propagation in biological tissues
- Multimodality fusion imaging
- Optimization techniques in inverse problems
- GPU computing in biomedical imaging
- Cloud computing in biomedical imaging

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.hindawi.com/journals/cmmm/guidelines/>. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/cmmm/mmbi14/> according to the following timetable:

Manuscript Due	Friday, 21 February 2014
First Round of Reviews	Friday, 16 May 2014
Publication Date	Friday, 11 July 2014

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