Special Issue on Asymptotic Methods

Call for Papers

Asymptotic Methods arising from the approximation problem in engineering and physics. Among the theoretical methods for solving many problems of mathematics, physics, and technology, asymptotic methods often provide results that lead to obtaining more effective algorithms of numerical evaluation. Taking advantage of the relative magnitude of the different controlling parameters and/or the disparate scales, a complicated problem is replaced by a set of simpler problems that can be either solved analytically or, if a numerical solution is required, can be solved by a relatively simple strategy. An awareness of the structure of the solution obtained by asymptotic methods is often helpful even when a direct numerical simulation of the full problem is adopted. As one of most important methods in the pure mathematics, **asymptotic methods** are of great attractions to researchers.

In this special issue, we intend to invite front-line researchers and authors to submit original researches and review articles on exploring **asymptotic methods**. Potential topics include, but are not limited to:

- Asymptotic expansions
- Regular perturbation problems
- Singular perturbation problems of secular-type and layer-type
- Linear and nonlinear stability and bifurcation theory
- Asymptotic methods in probability and statistics
- Asymptotic analysis for periodic structures
- Asymptotic analysis of singular perturbations
- Asymptotic and computational analysis
- Asymptotic methods of ordinary differential equation
- Asymptotic methods in statistical decision theory
- Asymptotic methods for investigating complex mathematical problems

Authors should read over the journal's Authors' Guidelines carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's Paper Submission System.

Please kindly notice that the "**Special Issue**" under your manuscript title is supposed to be specified and the research field "**Special Issue - *Asymptotic Methods***" should be chosen during your submission.

According to the following timetable:

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Publication Date	January 2015

Guest Editor:

For further questions or inquiries
Please contact Editorial Assistant at
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