



## Telecommunication Systems

### Special Issue on Traffic Modeling, Its Computations and Applications

Traffic modeling plays a key role in telecommunications. There are two main categories in the field. One is statistical modeling, e.g., fractal time series, and the other bounded modeling, such as traffic regulator of Cruz. Both gain wide applications, ranging from admission control to network security. However, there are many interesting as well as challenging issues in the area of traffic modeling. To be precise, modeling issues regarding local irregularity and or burstness, long-range persistence,  $1/f$  noise, and heavy-tailed distributions of traffic, computational issues regarding the fractal dimension and or burstness of traffic, and the applications of traffic models to various practical issues, such as anomaly detection in intrusion detection, queuing analysis, end-to-end delay, and so forth, are worth research. In such a ravishing theme of this special issue, the fundamental and applications of mathematical tools, such as fractals and network calculus, are welcome.

This special issue is on all theoretical, computational and practical aspects of traffic modeling. It would provide an opportunity of extending the research field of fractals, network calculus, and applied statistics for presenting new results in traffic modeling.

We are soliciting original high quality research papers on topics of interest connected with traffic modeling that includes but are not limited to the following main topics: (1) mathematical aspects of traffic modeling, (2) computational aspects of traffic modeling, (3) local irregularity, localized space-time and or time-frequency phenomena of traffic, (4) stochastic aspects of time series relating to the research of local irregularity and long-term persistence, (5) applications of traffic models to network security.

#### Guest Editors

##### Ming Li, PhD, Professor

(Corresponding Editor)

School of Information Science & Technology, East China Normal University, Shanghai 200241, PR. China

Emails: [mli@ee.ecnu.edu.cn](mailto:mli@ee.ecnu.edu.cn), [ming\\_lihk@yahoo.com](mailto:ming_lihk@yahoo.com)

URL: [http://www.ee.ecnu.edu.cn/teachers/mli/js\\_lm\(Eng\).htm](http://www.ee.ecnu.edu.cn/teachers/mli/js_lm(Eng).htm)

##### Dr. Pierre Borgnat

Laboratoire de Physique, École normale supérieure de Lyon, France

Email: [Pierre.Borgnat@ens-lyon.fr](mailto:Pierre.Borgnat@ens-lyon.fr)

URL: <http://perso.ens-lyon.fr/pierre.borgnat/index.html>

#### Submission Details

Instructions for authors can be accessed through <http://www.springerlink.com/content/101753/>. Manuscripts should be emailed as pdf, ps, or word format to the corresponding editor.

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