## A special issue of *Theoretical Computer Science* on Link Streams: Models and Algorithms

– call for papers –

http://link-streams.com

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## Scope.

Money or data transfers, contacts between individuals, product sales, network traffic, messages, or travels may all be modeled as link streams, i.e. sequences of links with temporal information. Studying the structure and dynamics of such streams is therefore crucial for many fundamental and applied questions. This raises many challenging issues, and an intense research activity is currently devoted to them, with contributions from graph theory, combinatorics, probabilities, complex networks, signal processing, and others. This special issue is devoted to all aspects of modeling and algorithmic challenges raised by link streams. It aims at promoting theoretical computer science research on these topics by putting together competing and complementary approaches, identify key results, methods, and directions, as well as encourage the convergence of these diverse work.

## Topics of interest include, but are not limited to:

- algorithms and data structures for link streams
- algorithmic challenges raised by link streams
- formal models for link streams, random link streams
- complexity of link streams problems
- properties of link streams, descriptive statistics
- compact and efficient encodings of link streams
- on-line, streaming, and external memory algorithms for link streams
- heuristics, approximations and sampling in link streams

We expect contributions in the field of theoretical computer science as well as experiments and empirical work supporting these theoretical contributions.

Selection process: each submission will undergo a quick evaluation of its fit to the call, then a full review by at least two experts of the field, and a first feedback to authors with rejection, acceptance, or minor revision decision. The reviewers will check revised versions, if any, and a final decision will be made from this.

## Important dates:

Deadline for submission: July 1st 2018 Feedback to authors: October 1st 2018 Final version: November 1st 2018 Final decision: December 1st 2018

Guest editor: Matthieu Latapy, CNRS and Sorbonne University, Paris, France

Details and submission: http://link-streams.com Mandatory: select "VSI: Link Streams" as Article Type in the submission system.