THE FIELDS INSTITUTE

FIELDS

CANSSI WORKSHOP *on*
COMPLEX SPATIO-TEMPORAL DATA STRUCTURES:
Methods and Applications

APRIL 21 - 24, 2015 *at* THE FIELDS INSTITUTE

This four-day workshop will bring together statistical methodologists and applied statisticians with a variety of expertise and research areas but with a common interest in complex and non-standard spatio-temporal problems.

'Complex' spatio-temporal data includes that which is observed irregularly, aggregated spatially, or exhibiting hierarchical but non-nested correlations. Modelling such data can require making inference on the underlying process throughout its entire spatial extent and not only at the locations where data are observed. Simplifying assumptions such as the Markov property and conditional independence can often lead to computationally feasible and accurate inferential methodologies. Any such assumptions should be consistent with the physical or biological process under investigation,however, and modelling of complex spatio-temporal data often requires subject-area as well as statistical expertise.

The workshop will include invited talks with prepared discussants on methodological topics and giving overviews of related application areas. A generous allocation of time will be allocated for informal sessions, discussions and other forms interaction amongst participants.

This workshop is an allied activity of the Fields Institute's 2015 Thematic Program on Statistical Inference, Learning and Models for Big Data.
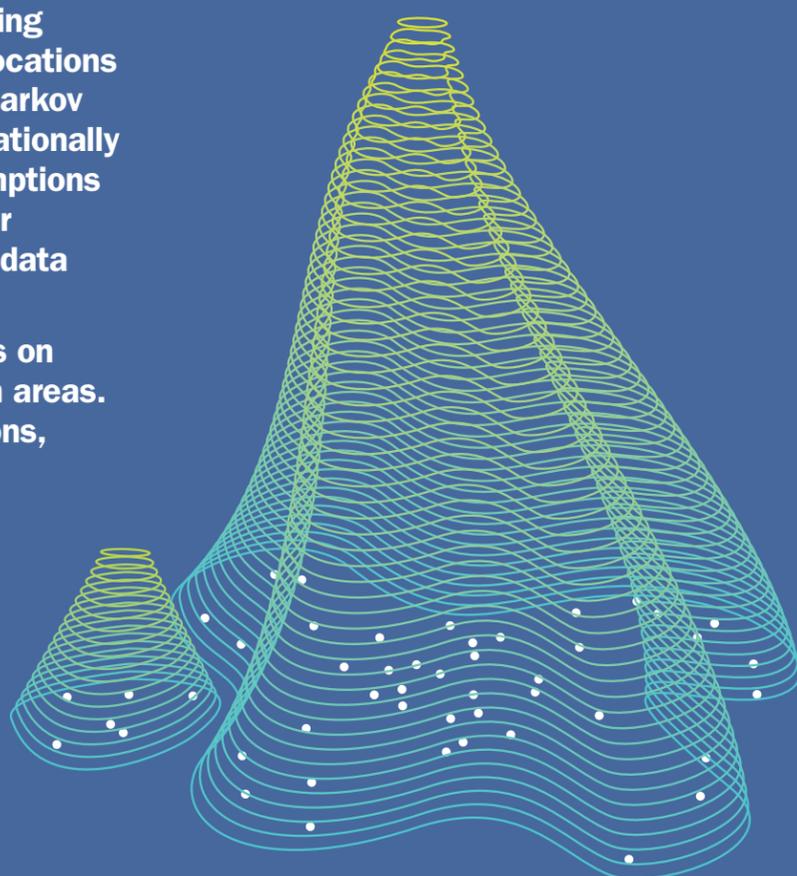
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For more information, please visit:
www.fields.utoronto.ca/programs/scientific/14-15/datastructures

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