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## Analysis Seminar

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Arundhathi Krishnan (UCC)

will speak on

**Markovianity and the Thompson monoid  $F^+$**

Tue 26th November 2019 at 4:20PM

Location: Seminar Room SCN 1.25

In the process of identifying a suitable distributional symmetry to describe Markovianity, it has been conjectured by C. Kóstler that there is a certain correspondence between unilateral Markov shifts and representations of the Thompson monoid  $F^+$ . After having illustrated this correspondence in the context of tensor products of  $W^*$ -algebraic probability spaces, I will present the following two general results. A representation of the Thompson monoid  $F^+$  in the endomorphisms of a  $W^*$ -algebraic probability space yields a noncommutative Markov process (in the sense of Kúmmerner). Conversely, such a representation is obtained from a noncommutative Markov process which is given as coupling to a so-called spreadable noncommutative Bernoulli shift.

This talk is part of the **Analysis** series. For more, see  
<https://maths.ucd.ie/seminars>