

# CABDyN / INET Oxford SEMINAR SERIES

## Oxford Martin School – Michaelmas 2014

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### ‘Partial identification in non-ergodic agent-based models’

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**Tuesday 11<sup>th</sup> November, 12.30 -14.00**  
**Seminar Room 1, Oxford Martin School**

#### ABSTRACT:

The ergodic axiom lies at the core of economics. The fact that ergodicity is seldom testable in the data favors assuming it from the onset. However, non-ergodic, multiple equilibria models might offer valuable insights into the functioning of the real world and be more appropriate in many modelling circumstances. Far from being intractable, we show that non-ergodic models are amenable to estimation, the condition for identification being similar to those for ergodic models. We show that non-ergodicity can be usefully thought of as an additional source of uncertainty which can be quantified in empirical applications. We test our method by means of a Montecarlo experiment on an agent-based model of the labor market.