Modelling the BGP Network: A Dynamic Logical Approach

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October 25, 2016

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- Given such a model the next goal is to turn this model into a prediction and analysis software.

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  - Or in a multi-agent system of agents with private informations: Agent "i" knows A, or something like "If the agent "i" knew A then she would have known B"

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- Suppose a multi-agent system where the agents can perform different action.
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  - Truthful private announcements
  - Deceitful announcements
  - And a large number of other attitudes that can be manifested by the agents

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  - Announcing routes
  - Withdrawing a route
  - The communication between agents changes the "information state" of (some) other agents.
  - The change resulted from these communications can greatly affect the decisions made by the agents

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- To discover when an agent filters certain routes.

Future Developments

- Proof of Concept
- Augmenting with active measurements for more realistic optimisation