

Modelling the BGP Network: A Dynamic Logical Approach

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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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 - ▶ If the agent “ i ” knows A then agent “ j ” knows $A \rightarrow B$

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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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 - ▶ The communication between agents changes the “information state” of (some) other agents.
 - ▶ The changes resulted from these communications affect the decisions made by the agents

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- ▶ What is the optimal (number of) transits for a specific agent.
- ▶ To discover when an agent filters certain routes.

FUTURE DEVELOPMENTS

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