

# Natural Language and Information Processing group

# NLIP people

- **Teaching staff:** Ted Briscoe, Stephen Clark, Ann Copestake, Simone Teufel
- **Research fellow:** Anna Korhonen
- **Postdoctoral researchers:** Diarmuid Ó Séaghdha, Laura Rimell, Mohan Ganesalingam
- **Research students:** Awais Athar, Richard Bergmair, Frannie Chang, Johanna Geiß, Yufan Guo, James Jardine, Colin Kelly, Thomas Lippincott, Stuart Moore, Marek Rei, Ekaterina Shutova, Lin Sun, Helen Yannakoudakis
- **Visitors and local collaborators:** Øistein Andersen, Paula Buttery, Arnaldo Candido

# Quantifying noun phrases

## Aurelie Herbelot

The Four-toed Hedgehog is a small species of hedgehog  
has short legs  
is displayed in hedgehog shows  
is in the third cage on the right

- How many hedgehogs?
- Cues from syntax and semantically similar sentences to classify (some, most, all).
- Application to ontology extraction.

# Language of mathematics

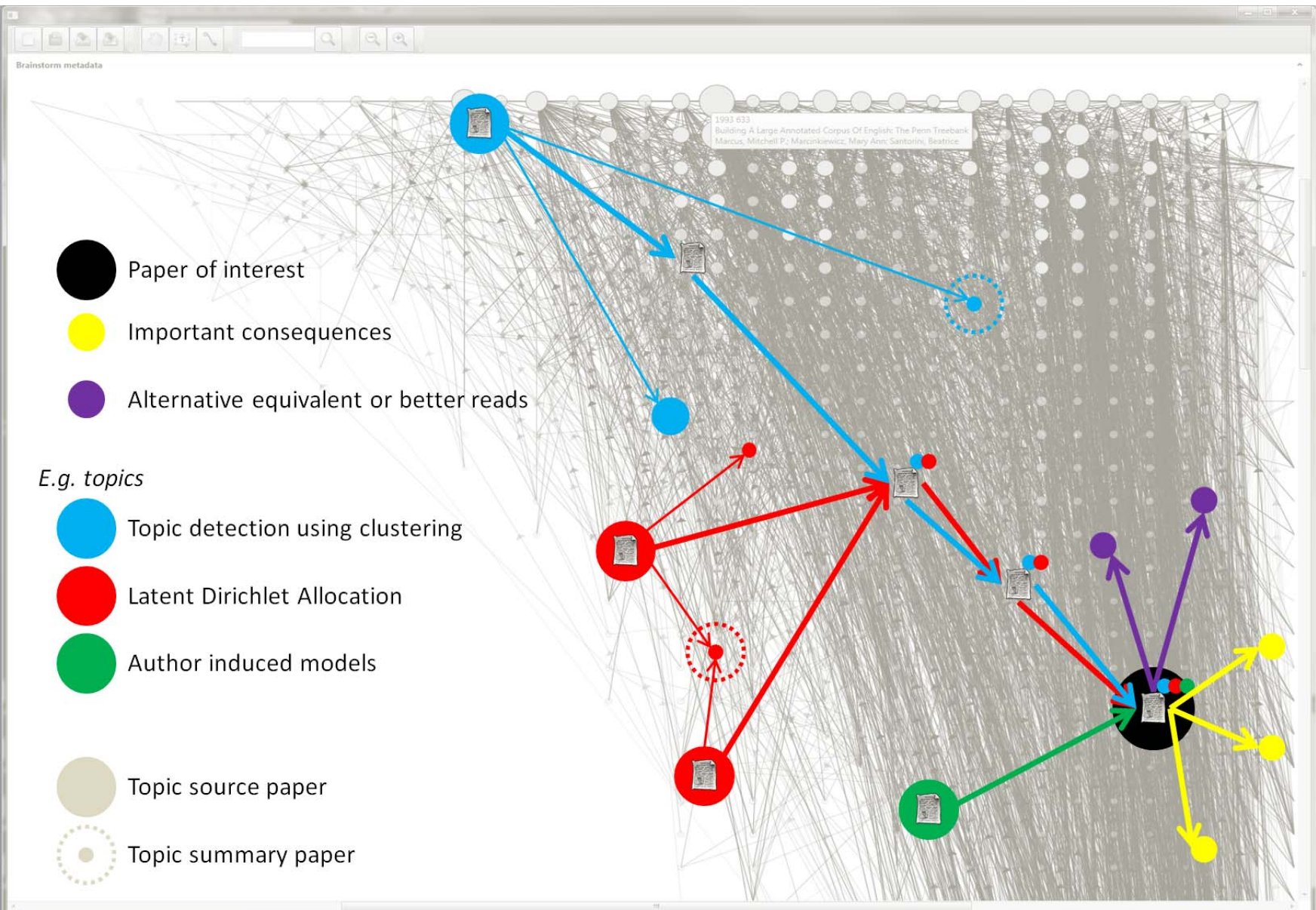
## Mohan Ganesalingam

Then  $V = U \cap H$  for some  $U$  in  $\mathcal{T}$ , by definition of  $\mathcal{T}_H$ , and  $U \cap H = i^{-1}(U)$ , so  $g^{-1}(V) = g^{-1}(i^{-1}(U)) = (i \circ g)^{-1}(U)$ .

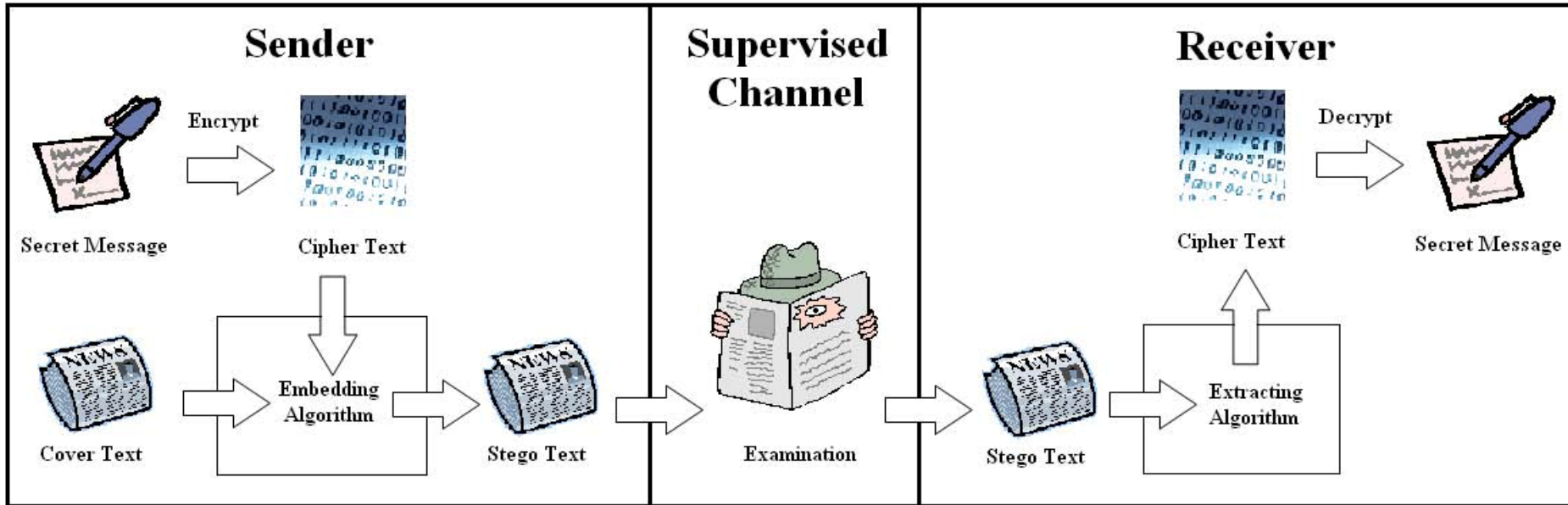
**Theory:** Properties of mathematics as a language.

**Applications:** `Real' mathematics in automatic theorem proving.

# Research paper recommendations: Jimme Jardine



# Linguistic Steganography: Frannie Chang



Using automatic paraphrase to create stego text.





# PhD research in the NLIP group

- Diverse topics, theoretically- and practically-oriented research.
- Many collaborations with other groups (Lab, other Cambridge depts, worldwide).
- Some PhD research is part of larger funded projects, but most relatively independent.
- Preparation for PhD: ACS MPhil language modules and project.