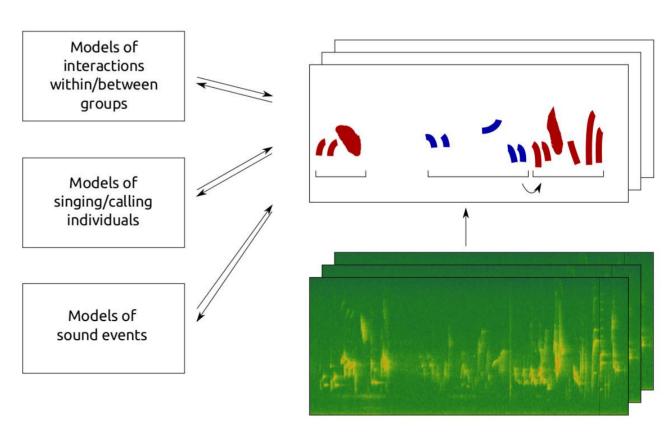# Structured machine listening for soundscapes with multiple birds

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- Machine learning and signal processing for making sense of bird sounds
- Applications
  - species identification
  - population monitoring
  - characterising interactions between individuals: answering behavioural questions
  - soundscape transcription
- Methods
  - point process models
  - autoencoders
  - flow networks
  - random forests
  - feature learning
  - PHD filters

Models of interactions within/between groups

Models of singing/calling individuals

Models of sound events

http://mcld.co.uk/research