Modelling the Uncertainty in Winning Grants

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“All models are wrong, but some are useful”

Motivation

• We need to win externally funded research grants
  – to do better and more research 😊
  – to train the next generation at post-doctoral level 😊
  – to improve our financial sustainability 😐

• Context:
  “In 2009 of the 42 applications to EPSRC from ECS, only 5 were successful 😄”

• We need to consider:
  – Uncertainties in the process this talk
  – Cost of grant writing
  – Quality, quantity trade-off
Referee Model

Referee Behaviour

Referee Usage Model

Grant Quality

Expected Success

Southampton proposal of quality 0.8;
Every other proposal of quality 0.7;
My expected success rate is 50%
Conclusions

- **Average winning probability**
  - We should continue to write good quality grants

- **Variance of winning probability**
  - Grant winning should **not** be used as a tool for performance management

**Future Work:**
- Cost of writing grants Vs Profit from funded projects
- Model quality-quantity trade-off