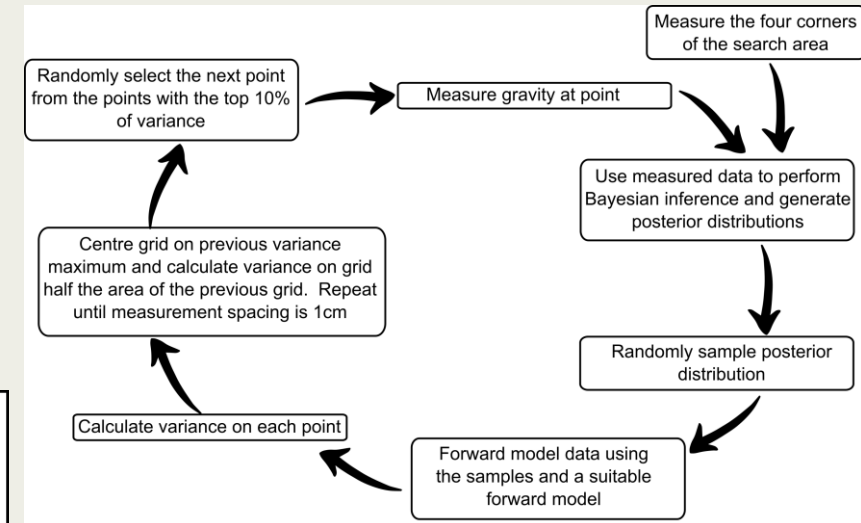


Dr Dan Boddice & Prof. Asaad Faramarzi
School of Engineering, University of Birmingham

P3.3-780

- Our poster is about speeding up gravitational field measurements taken during an OSI by using looped inference on the collected data to choose the next point.
- We used a Bayesian inversion process to determine a probabilistic posterior output and range of models of where the feature is, and used the results to select points on the grid which resolved the most uncertainty



- We tested this on a synthetic model of a horizontal tunnel feature in a 500 x 500 m area and compared to regular grid approaches
- We showed an improvement in both speed (43.75% less gravity points to locate) as well as accuracy (higher occupation probability) compared to regular grids
- If you want to find out more, come over for a chat in front of our poster



• Measurement Point — Tunnel Location

81 Points

— Grid — BU - - - Prior

