

Optimising assessment graphs

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Often a panel has to assess a number of objects, but not every object is evaluated by each assessor, and the match between an assessor's expertise and the object may be variable.

Ref [1] describes, tests and provides robustness measures for calibrated panel assessment, i.e. a way of combining the scores to produce a reasonable outcome. It resolves the issues of different assessors having different standards and different expertise.

The paper raises the question, however, of how best to design the assessment graph, i.e. which assessors evaluate which objects, to make the outcome as reliable as possible, subject to constraints like the workload for assessors and declared conflicts of interest.

The project is to come up with good principles for the design of the assessment graph, given prior assumptions on the confidences for the complete bipartite graph.

It is possible that some agency (e.g. HEFCE, EPSRC) may approach us to implement the method, in which case advice on design of the assessment graph is crucial, and they could be expected to contribute to funding further development of the method, e.g. by a PhD studentship.

[1] R.S.MacKay, R.Kenna, R.Low, S.Parker, Calibration with confidence: a principled method for panel assessment, Roy Soc Open Sci, planned to appear 8 Feb 2017.