Remote Analysis and Differential Privacy

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Remote Analysis is concerned with confidentialising the outputs of statistical analysis. Several national statistical agencies are investigating this as a way of making more detailed data available for research. Differential privacy is concerned with producing statistical analysis outputs which do not change much if an individual leaves or joins the underlying database.

In this talk I will discuss the similarities and differences between remote analysis and differential privacy, using logistic regression as a case study.

I will also provide a comparison of remote analysis with traditional statistical disclosure control for protecting the confidentiality of business data, in joint work with Natalie Shlomo. Examples will include exploratory data analysis and linear regression.