**What can an Open, Computational Approach Bring to the Social Sciences?**

**Abstract**

Dr Charles Rahal will firstly introduce key concepts related to Open, Reproducible, and Responsible Research. Such concepts – such as the use of free and open-source software (FOSS) – make substantial contributions to ensuring the maintenance and validity of the scientific record. He will then discuss a range of different topics and projects which use original, unstructured, and freely available data sources in conjunction with open and custom-built software libraries to generate new insights – both inferential and predictive – into old and new problems across the (social) sciences. The subdomains of interest are varied, but typically span civil society, social care, climate change, public administration, and the scientometric evaluation of research (and research policy) at scale. The seminar will discuss the development of exciting new tools built in FOSS which allow better visualisations of uncertainty, and conclude with discussions of a replication project regarding the use of pseudo-random number generation, all in the interest of enhancing the scientific record.