



# Oriël Talks

## Dealing with Data

24 November, 2022

6-7pm in the Harris Lecture Theatre,  
Oriël College, Oxford



### Nicholas Teh

**Algorithmic Approaches to Better Collective Decisions**  
Consider a community wishing to decide on several binary issues by means of issue-by-issue majority voting. However, some voters may be confused about some of the issues, which may lead to objectively worse outcomes. We will look at three algorithmic approaches to dealing with voter confusion, and helping the community reach better collective decisions.



### Martin Wafula

**On lossy Compression of Random Graphs**  
This presentation focuses on information-theoretic compression of random graphs, highlights the challenges in lossy compression of the graph and gives preliminary results.



### Lia Yeh

**Drawing Quantum Computation**  
My research group in Oxford invented and has been developing a graphical calculus formalizing how to draw any quantum computation as diagrams since 2008. I will cover a few of its many research applications, while also talk about using it to teach quantum computing to as young as high school students.