

## **National Training School in Theoretical Chemistry**

### **Mathematics**

**Ali Alavi (Cambridge) and Martin Galpin (Oxford), 8 lectures, 2 tutorials**

Mathematics and intuition are the bedrock of any theoretical subject. In these two sets of lectures we will develop the ideas of probability, as applicable to statistical mechanics and computer simulation. The second theme will be a friendly introduction to complex analysis, as used widely in quantum many-body theory, scattering theory, and the like. The lectures will focus on understanding and using the techniques rather than mathematical rigor.