



# Number Theory Seminar

## Oscillations in the sequence of Fourier coefficients of a modular form

**Dr. Corentin Darreye**  
University of Bordeaux, France

### **Abstract**

The aim of this talk is to introduce some recent results about the sign and the size of Fourier coefficients of half-integral weight modular forms. This is part of a more general topic in the theory of modular forms about showing evidence of cancellations and thus oscillations in the sequence of Fourier coefficients. This kind of problem is deeply related to purely arithmetic questions and equidistribution results. Hence, after introducing an overview of the theory of modular forms and in order to motivate the end of my talk, I will present an application of this theory in the particular case of half-integral weight modular forms.

Date:	May 9, 2022 (Monday)
Time:	3:00 - 4:00pm (Hong Kong Time)
Venue:	ZOOM: <a href="https://hku.zoom.us/j/">https://hku.zoom.us/j/</a>
	Meeting ID: 232 576 6007

*All are welcome*