

## UCL Undergraduate Mathematics Colloquium

Homepage: https://ucl-ug-col.github.io

Instagram: https://www.instagram.com/ucl.umc

YouTube: https://www.youtube.com/@uclundergradmathcolloquium5107

E-mail: uclugmathcol@gmail.com

## Basic theory of Fourier transform

## 25<sup>th</sup> October 2023

Abstract: One of the most well-known concepts in mathematical analysis is the Fourier transform, a powerful technique that has various applications in the study of physics, engineering and many other fields. The Fourier transform has a number of convenient properties, which allows us to connect abstract mathematical theory to physical phenomena. The aim of this talk is to look at Fourier transforms from a theoretical point of view. Namely, we will discuss some of the reasons why mathematicians consider Fourier transforms 'nice' operations.

This talk is mostly self-contained, although prior exposure to the Fourier transform and other topics in mathematical analysis can be helpful. Students from outside the mathematics department are very much welcomed.



Speaker: Benjamin Yang

Location: Gordon Street (25) Maths 706

Time: **4pm - 6pm**