國 立 清 華 大 學 數 學 系 學 術 演 講
NTHU MATH Colloquium

講題　　Nonlinear Energy Minimization for Surface Parameterizations

講者　　樂美亨教授（師大數學）

時間　　2022.11.07 (Mon.) 16:00 – 17:00

地點　　第三綜合大樓**2樓 Room 201**（請同學配戴口罩）

茶會　　15:30, Room 707

Abstract

The surface parameterization aims to efficiently compute a diffeomorphism between a surface and a canonical domain. The mapping induces a unified coordinate system on the surface, which can be applied to simplify 3D image and geometry processing tasks, such as registration, remeshing, and texture mapping. In this talk, I will introduce the theoretical foundation of nonlinear energy minimization for the computation of conformal and area-preserving parameterizations of simplicial surfaces, respectively. Applications to image and geometry processing will be demonstrated thereafter.