



Workshop of Undergraduate Research Opportunity Program (2020-21)

Undergraduate Research Opportunity Program (UROP) aims to provide opportunities for undergraduate students to get first-hand experiences in carrying out academic research related to pure and applied mathematics. This workshop provides a platform for selected students to share about their research achievements.

Date: Friday, 30 July 2021 (Online via Zoom)

Meeting Link: <https://cuhk.zoom.us/j/93915958159>

09:25 – 09:30		
Welcome Speech by Professor Jun ZOU, Chairman of Department of Mathematics, CUHK		
Hong Kong Time	Name of Selected Student(s)	Title of Presentation
09:30 – 09:55	LAW Sum Kiu	Lie Theory and the Baker-Campbell-Hausdorff Formula
09:55 – 10:20	CHAN Yuk Fai, LI Jiaxin and LI Meixi	Prediction of Sleep Apnoea in Child by Analysing 3d Facial Structures
10:20 – 10:45	LI Muyun, ZHANG Xinfang and ZHANG Yifan	Early Detection of the Alzheimer's Disease.
11:00 – 11:25	AU Tsz Nga and HO Cheuk Hin	Interplay of Machine Learning and Traditional Numerical Methods in Computational Fluid Dynamic (CFD) problems
11:25 – 11:50	LEE Chung Yin	Eigenvalues and the Stability of Shear Flows
11:50 – 12:15	KWONG Tat Wa and SO Wing	Finding Irreducible Representations by Character Theory
12:15 – 12:40	HUANG Zhengyang and WONG Ka Lam	Prime Number Theorem
14:00 – 14:25	CHAN Tsz Hong Clive Junior, LEE Shun Ming Samuel and NGAI Chi Ki	Review on Classification of Root System
14:25 – 14:50	LI Kin Lok and TONG Nok To Omega	Elliptic Curve Cryptography
14:50 – 15:15	ZHANG Huan	Basics of Riemann Surface and Hurwitz Theory
15:15 – 15:40	LIU Lezhi	Riemann Surfaces and Algebraic Curves
15:55 – 16:20	LEUNG Chung Yin	Application of Legendre Transform on Bertrand's Theorem and its Significance
16:20 – 16:45	WONG Po Chai	Comparative Analysis of Back-propagation and Radial Basis Function Neural Network using UCI Datasets.
16:45 – 17:10	PEI Zehua	Exploration and Experiment of Image Super-Resolution
17:10 – 17:35	CHU Yin King	VLAYER - Investigate the Effect on Replacing General Convolutional Layers in SR models by Combination of Down-Sampling and Up-Sampling Methods