



Interdisciplinary in Secondary Mathematics Classrooms: Leveraging Technology to Connect Mathematics with Science, Engineering, and Arts



Speaker: Prof. Li Shuhui (East China Normal University)



About the speaker

Prof. Li Shuhui is an Associate Professor in the School of Mathematical Sciences at East China Normal University (ECNU), China, where she also serves as the Deputy Chair of the Mathematics Education Department. After obtaining her PhD in mathematics education at Teachers College, Columbia University, USA, she joined ECNU as a post-doc research fellow in 2020. Prof. Li has led several competitive research grants, including the Ministry of Education Youth Fund Project for Humanities and Social Sciences Research and the ECNU Youth Pre-Research Project for Humanities and Social Sciences Research, as Principal Investigator. Her research findings have been published in prestigious journals, including *International Journal of STEM Education*, *Educational Technology Research & Development*, *Educational Studies in Mathematics*, and *British Journal of Educational Technology*. Her research focuses on ICT in mathematics education, interdisciplinary and mathematics curriculum and textbooks, international comparative education, and mathematics teacher education.

Abstract

While interdisciplinary Science, Technology, Engineering, Arts, and Mathematics (STEAM) education has gained global momentum, meaningfully integrating these disciplines into secondary mathematics classrooms remains a significant practical challenge for teachers. This presentation addresses this gap by examining how technology can serve as a bridge for K-12 interdisciplinary learning. Drawing on recent policy documents, the talk explores four distinct secondary classroom case studies that illustrate how mathematics can be dynamically connected with science, engineering, and the arts through various technological learning environments. Finally, the presentation highlights the core challenges teachers face in executing these integrations and outlines future research directions for tech-enabled STEAM education.

24 July 2026 (Fri)

11:00 a.m. - 12:30 p.m.

Room G2, Ho Tim Building, CUHK



Online registration:
<https://cloud.itsc.cuhk.edu.hk/webform/view.php?id=13735293>

Registration deadline: 23 July 2026 (Thu)

Enquiries:
3943 1374 / shinylau@cuhk.edu.hk
3943 8197 / ericcheung@cuhk.edu.hk