IEEE Thailand Section

IEEE International Conference on
Multimedia and Expo (ICME 2026)

Marriott Marquis Queen's Park Hotel, Bangkok, Thailand
5 - 9 July 2026
Hosted by:

IEEE | IEEE COMPUTER SOCIETY | CAS | IEEE ComSoc IEEE Communications Society | IEEE Signal Processing Society

ICME 2026
Bangkok, Thailand | 5 – 9 July 2026

Call For Workshop Papers
Physical Principles for Reliable 3D Modelling in Multimedia (P3DMM)

This workshop aims to advance physics-informed and physically interpretable 3D learning and modelling for multimedia, industrial and biomedical scenarios. We welcome methods that incorporate illumination, reflectance, geometry, and broader physical phenomena. These physical constraints are essential for reliable, scale-consistent and measurement-level 3D understanding in real-world environments.

We also invite work that integrates physical priors with multimodal signals, including RGB-D, multi-view/video, IMU and robot kinematics, force/tactile data, acoustic cues, hyperspectral/spectral imaging and other clinical or industrial sensing modalities. Submissions exploring how foundation models and multimodal pre-training reveal physically meaningful structures or improve trustworthy 3D decision-making are strongly encouraged.

Topics of interest include but are not limited to:

☐ Learning-based 3D modelling with physical principles
☐ Physics-coherent neural fields and radiance models
☐ Shape, lighting and material decomposition with physical consistency
☐ Data-driven methods enriched by physical cues
☐ Reliable 3D modelling in complex multimedia environments
☐ Physical cues for digital twins and manufacturing
☐ Multimedia applications requiring physically interpretable 3D models
☐ Datasets, metrics and evaluations for physics-informed 3D modelling

2 Best Papers Award!

Workshop Chairs

Yakun Ju (University of Leicester, UK)
Hu Yang (University of Leicester, UK)
Tianyang Zhang (University of Oxford, UK)
Dan Dai (Aston University, UK)
Zeyu Xiao (NUS, Singapore)
Zhuoyuan Li (USTC, China)
Hadi Amirpour (University of Klagenfurt, Austria)
Kenneth Kin-Man Lam (PolyU, HK)

Submission DDL:
Mar. 25, 2026

Notification:
Apr. 25, 2026

Workshop Date:
Jul. 5, 2026
9:30am - 12:30pm