

## INTRODUCTION TO LIM FROM THE SFRIES AND GENERAL CHAIRS

## THE IS&T LONDON IMAGING MEETING:

MATERIAL PHYSICS, APPEARANCE, AND REPRODUCTION

The London Imaging Meeting (LIM), a collaboration between the Society of Imaging Science and Technology (IS&T) and the Institute of Physics (IoP), was held at the IoP in London from the 28th through the 30th of June 2023. LIM is a yearly topics-based meeting in the area of imaging science. This year's topic was Material Physics, Appearance, and Reproduction (MAPaR). The LIM meeting also incorporated the second Material Appearance Network for Education and Research (MANER) event.

The first day of this year's LIM meeting was dedicated to a summer school in Material Appearance. The school, which was sold-out, comprised interdisciplinary courses on optical models, metrology, rendering, and the perception of material appearance. This was then followed by the main technical conference. We had a great program of talks comprising 2 keynotes, an invited lecture, 5 focal talks, and 10 oral and 15 interactive presentations. Moreover, we also had ample time to meet each other between talks and think about how the ideas presented at LIM will contribute to future research.

A broad range of topics were presented including on appearance attributes such as color, translucency, and gloss. This last topic, gloss, received the most attention and was discussed throughout the conference and notably in regard to its appearance and measurement. Measurement, in general, was an important conference theme

and there was detailed discussion around the trade-off between making accurate single measurements of physical attributes versus less accurate but higher resolution image-type assessments. Other important topics that were presented included the psychophysical measurement of appearance and the simulation and reproduction of appearance. Regarding the latter topic we had presentations in the fields of 3D printing, virtual reality, cosmetics, and art conservation.

LIM 2023 highlighted both the richness and dynamism of the field of material appearance. The papers in these proceedings will help introduce many of the current important topics in the field (highlighting the work both of established and new researchers). Of special note is the Best Paper winner Stijn Beuckels, from KU Leuven in Belgium, "A handheld image-based gloss meter for complete gloss characterization".

We still have a long way to go to quantify, understand, and reproduce all the visual effects that surround us! So, we hope you find inspiration in these proceedings, and we look forward to participating in ongoing discussions, and of course, seeing you at future meetings.

-Marina Bloj and Lionel Simonot, LIM 2023 Conference Chairs and Graham D. Finlayson, LIM Series Chair



Instructors and participants in the LIM 2023 one-day Summer School, with classes on Material Perception from Hannah Smithson, University of Oxford (second from left); From Lambertian Surfaces to Human Faces: Material Appearance in CG from Giuseppe Claudio Guarnera, University of York (fifth from right); Optical Models for Material Appearance: Basic Notions from Mathieu Hébert, Laboratoire Hubert Curien and Institut d'Optique (third from right); and Metrology for the Measurement of Appearance from Gaël Obein, LNE-CNAM (far right).