

# LIM Technical Program 2025

## TUESDAY 9 SEPTEMBER 2025

9:00 – 9:30 REGISTRATION OPEN / WELCOME COFFEE

9:30 – 10:30 WELCOME AND OPENING KEYNOTE

*LIM General Chairs: Graham Finlayson, University of East Anglia and Javier Vázquez Corral, Computer Vision Center and Universitat Autònoma de Barcelona*

*General Co-chairs: Sophie Jost, ENTPE and Jon Hardeberg, NTNU*

### **The Convergence of Lighting and Imaging**

Michael Murdoch, Rochester Institute of Technology

10:30 – 11:00 COFFEE BREAK

11:00 – 12:00 VISION SESSION

*Focal chair: Rafal Mantiuk, University of Cambridge*

### **FOCAL 1: Individualized colorimetry for correcting observer metamerism failures in narrow band display and lighting.**

Andrew Stockman, Institute of Ophthalmology University College London

*Session chair: Andrew Stockman*

### **Modelling the phantom array from the spatial waveform on the retina**

Chan-Su Lee, Yeungnam University

### **Gauss-Seidel Retinex**

Afsaneh Karami, University of East Anglia

12:00-12:30 PRESENTED POSTERS

*Session chair: Jane Li, ENTPE*

### **Towards Smarter University Digital Twins: A Real-Time Rendering Pipeline for Street-Lighting**

Ghassen Ben Hnia, Toulouse University

### **Architecture as a communicative medium: the role of media facades and dynamic lighting in contemporary public spaces**

Çiçek GEZGEN Hatay Mustafa Kemal University

### **RTI beyond relighting: Image analysis for archaeological Oseberg textiles**

Muhammad Arsalan Khawaja, NTNU

### **Fast Spectral Data Simulation from srgb Images Using K-Dimensional Search Trees**

Aiman Raza, ENTPE

### **Convexity and the set of Planckian lights**

Elaheh Daneshvar, University of East Anglia

### **Joint estimation of spectral illuminant and reflectance from an RGB image**

Rafal Mantiuk, University of Cambridge

**Noise-Aware Encoder Training and Specialized Denoiser for Efficient JPEG AI Compression and Denoising**

Abdellah EL MENNAOUI, EURECOM

**Perceived food quality under metameric vs. Chromatic illumination changes**

Ilgin Cebioglu, Newcastle University

**Tuning light to make fruit look natural: Memory colours, metamers and illumination modulation**

Yesesvi Konakanchi, University of Sussex

**Improved Rendering of Car Paint Sparkle with Random Tiling Approach**

Benjamin Lanfer, BASF Coatings

12:30-13:30 LUNCH BREAK

13 :30 – 14 :30 MEASUREMENT SESSION

*Focal chair: Jon Hardeberg, NTNU*

**FOCAL 2: Metrological challenges in HDR imaging for luminance measurement**

Lou Gevaux, LNE - Conservatoire National des Arts et Métier

*Session chair: Lou Gevaux*

**Physical and perceptual measurements of temporal dynamics in natural daylight**

Cehao Yu, Newcastle University

**In situ spectral glazing transmittance estimation from a single image picture using neural network approach.**

Raphaël Labayrade, ENTPE

14:30 – 15:00 COFFEE BREAK

15 :00 – 16 :00 RELIGHTING AND TONE MAPPING SESSION

*Focal chair: Alexandra Psarrou, Westminster University*

**FOCAL 3: Object Color Relighting with Progressively Decreasing Information**

Raimondo Schettini, University of Milano Bicocca

*Session Chair: Raimondo Schettini*

**A Color Preserving Tone Mapping Framework in the Intrinsic Domain**

Simone Melcarne, EUROCOM

**Semantic Aware Diffusion Inverse Tone Mapping**

Abhishek Goswami, Warwick University

16:00-19:00 POSTER SESSION FOLLOWED BY DRINKS AND PIZZA

## WEDNESDAY 10 SEPTEMBER 2025

### 9 :00-10 :00 KEY NOTE

*Session chairs: General Co-chairs Sophie Jost, ENTPE and Jon Hardeberg, NTNU*

#### **Reluctantly starting a hyperspectral camera company: a guide to the terrors of the start-up world**

Robin Wang, Living Optics

### 10:00- 10:30 LATE BREAKING POSTERS

*Session chair: Aiman Raza, ENTPE*

#### **Region-Based SSC Prediction in the Interior of Kiwifruit via Hyperspectral Imaging and Chemometrics**

Jobin Francis, Fraunhofer Institute for Computer Graphics and Research IGD

#### **The Leeds Garment Image Database: linking material appearance to visual and tactile perceptions**

Molly Talbot, University of Leeds

#### **Evaluating Preference for Images Enhanced with Simple Tone Curves**

James Bennett, University of East Anglia

#### **Evaluating Visual Thresholds of Flicker Metrics: A Pilot Study Within the TWINKLE Project**

Jiaye Li, ENTPE

#### **Computational Analysis of Real-World Eye-Level Light Exposure through Spectacle Lenses**

Emmanuel-Kobia Acquah, Transitions Optical

#### **Modeling specular goniochromatic materials using near-specular and diffuse reflectance**

Bitu Panahi, NTNU

#### **Unique Hue under Wide Colour Gamut for Colour Appearance Modelling**

Xinyi Zhao, University of Leeds

#### **Validation of Individual Observer Colour Matching Functions with Narrowband Stimuli**

Jiaye Li, ENTPE

#### **Effects of Tinted Lenses on Perception of Natural Scenes**

Elisa Dessenne, ENTPE

#### **Evaluation of Viewer Preferences for Ultra-Wide Color Gamut Displays**

Farnaz Agahian, Samsung

#### **Is your perceived white influenced by the display-specific characteristics of your phone?**

Yesesvi Konakanchi, University of Sussex

### 10:30- 11:30 COFFEE AND POSTER SESSION

### 11:30-12:30 COLOUR AND SPECTRA SESSION

*Focal chair: Michael Murdoch, RIT*

#### **FOCAL 5: How to define physically a color for non-uniform surfaces?**

Hermine Chatoux, University of Bourgogne Europe

*Session chair: Hermine Chatoux*

#### **Metamer Mismatch Bodies: Foundations, Methods, and Applications in Color Science**

Alexander Forsythe, Simon Fraser University

## **Colour Corrected Smoothest Reflectance Estimation**

Author: Violet Mayne University of East Anglia

**12:30- 14:00 LUNCH BREAK**

**14:00-15:00 LIGHT AND IMAGES SESSION**

*Focal chair: Raphaël Labayrade, ENTPE*

### **FOCAL 4: Lighting Beneath the Surface: Spectral and Polarised Cues for Next-Generation Facial Imaging**

Giuseppe Claudio Guarnera, Department of Computer Science, University of York

*Session chair: Giuseppe Claudio Guarnera*

#### **On the fair use of the ColorChecker dataset for illuminant estimation**

Simone Bianco, University of Milano

#### **A Neural Quality Metric for BRDF Models**

Behnaz Kavoosighafi, Linköping University

**15:00-15:30 COFFEE BREAK**

**15:30-16:30 CLOSING KEYNOTE**

*Session chairs: General Co-chairs Sophie Jost, ENTPE and Jon Hardeberg, NTNU*

#### **Does perceiving the illumination have anything to do with colour constancy?**

Anya Hurlbert, Newcastle University

**16:30-17:00 BEST PAPER AWARD AND CLOSING**