
HIGH DYNAMIC RANGE / WIDE COLOR GAMUT

Wednesday, May 23 / 10:40 am – 12:00 pm / Room 103

Chair:

Helge Seetzen, *BrightSide Technologies, Vancouver, British Columbia, Canada*

Co-Chair:

Jennifer Gille, *Qualcomm MEMS Technology, San Jose, CA, U.S.A.*

21.1: Invited Paper: The Hopeful Future of High-Dynamic-Range Imaging (10:40)

G. Ward

BrightSide Technologies by Dolby, Albany, CA, U.S.A.

An overview of the challenges and opportunities presented by high-dynamic-range (HDR) imaging will be presented. The length of the imaging pipeline will be examined from creation and storage through image editing and display. How each stage is affected by a move to HDR will be discussed.

21.2: Invited Paper: An Overview of Dynamic-Range Reduction (11:00)

E. Reinhardt

University of Bristol, Bristol, U.K.

Techniques for displaying high-dynamic-range (HDR) images on conventional display devices are gaining in importance, and rapid advances in this field have overtaken the review of dynamic-range-reduction algorithms from a year ago. The current state of the art of dynamic-range reduction will be reviewed, with an emphasis on sigmoidal compression.

21.3: New Metric for Display Color-Gamut Evaluation (11:20)

M. Ben Chorin, D. Eliav, S. Roth, A. Pagi, I. Ben David

Genoa Color Technologies, Ltd., Herzelia, Israel

A metric for the evaluation of display color gamut based on summing the probability of using a certain part of the display color gamut multiplied by an impact parameter for that color region is suggested. We further present methods for evaluating the probability of use and the impact of color.

21.4: Primary Design of Wide-Color-Gamut Displays for Matching the Color Gamut of Objects (11:40)

S. Wen

Chung Hua University, Hsinchu, Taiwan, ROC

A method for designing the primary-color coordinates of a wide-color-gamut display such that its color gamut best matches an object color gamut was studied with the goal of having the display reproduce the object color most vividly. A display with three monochromatic primaries is taken as an example.

LUNCH

(12:00-2:1)

AUTHOR INTERVIEWS

(6:30-7:30)