DISPLAY METROLOGY
SHORT COURSE

Two half-day lectures

Two or three days laboratory work

August 19-22, 2008

Boulder, Colorado, USA

NIST (National Institute of Standards and Technology) and the Flat Panel Display Laboratory (FPDL) in Boulder, Colorado, are offering a short course on display metrology. The course will consist of two half-day lectures followed by afternoons and two days of laboratory work covering 13 different experiments, diagnostics, and measurements (an extra day, Friday, has been added for those who wish to finish all experiments completely). The area around Boulder is beautiful! You may want to plan for an extended visit of the area to enjoy the mountains while you are here both for hiking and skiing (e.g., Estes Park, Rocky Mountain National Park, Arapahoe National Park, Winter Park, etc.), but be cautious of the high altitude. Breakfasts, lunches, and snacks are provided all four days of the course.

Items you will receive to keep:

FOR MORE DETAILS VISIT *www.fpd.nist.gov*

- White reflectance standard that you characterize in our laboratories
- Black glass sample that you characterize in our laboratories
- Display reflection samples that you characterize in our laboratories
- The 322 page VESA Flat Panel Display Measurements Standard (FPDM) or equivalent
- USB memory stick containing examples of the detailed experiments (completed spreadsheets) and the lecture presentation (animated slides)
- Mini-flashlight for quick reflection-property inspections
- Hardcopy and softcopy of lecture presentation

Laptops are discouraged, please don't bring them (there is no room in the labs). People seem to enjoy working on the experiments in pairs or threesomes.

Topics considered: Review of radiometry, photometry and colorimetry; discussion of quantities and units used in photometry; review of simple photometric calculations; review of types of measurement instrumentation; veiling glare and management of stray light; display-reflection characterization; reflection haze and robustness; bidirectional reflectance distribution function; projection measurements; diagnostics; measurement uncertainty; etc.

Laboratory work: Reflection robustness, projection measurements, reflection measurements, characterization of white reflectance standard and black glass, BRDF measurements (low and high resolution), diffuse reflection measurements, color measurements and detector diagnostics, use of masks and frusta, and use of stray-light-elimination tubes (SLETs).

Registration Information:

Cost: $1650 per person

Contact: Wendy McBride
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Technical Contacts (Instructors):

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Online registration available (note "s", case sensitive, chronologically listed): https://rproxy.nist.gov/CRS/

Please note: The cost may increase in the future. Class size is currently limited to 24 people. Any course may be cancelled if too few register. There will be no Internet access provided within NIST.