Topic: Studio Reference Displays
Technology, Standards, and Missing Standards

Presenter: Charles Poynton

Date: Tuesday, December 14th, 2010
Time: 7:00 PM
Location: Deluxe Post Production
424 Adelaide Street East, Toronto

Arranged By: Reid Robertson, Peter Armstrong
Sponsor: SONY of Canada

For the last decade or more, creators of HD content have relied upon BVM-class CRT displays to make critical creative tone and colour judgements of their material. However, broadcast-grade CRT displays are no longer commercially available. It is questionable whether displays currently being advertised as "Grade 1" actually meet the needs of high-end content creators, and it is not yet clear exactly what specifications are required of emergent studio displays.

In this talk, Charles Poynton will discuss issues concerning faithful display of content in the post-CRT world. He will outline the behaviour of BVM-class CRT displays, and introduce the "GOGO" model, which incorporates gamma of about 2.4 (not 2.2, as commonly assumed, and documented in white papers by companies such as Sony and Panasonic). His presentation will describe how LCD and plasma displays can be made to correspond to the BVM characteristics and will discuss how gain and offset adjustments (commonly called CONTRAST and BRIGHTNESS) are introduced, why those names conflict with the common usage of the words (which refer to perceptual phenomena), and how the CONTRAST and BRIGHTNESS controls effectively perform the reverse of their names. The very recent ITU-R agreement on elements of a standard EOCF for HD, augmenting BT.709 will be covered as well as the best-fit power function to the BT.709 camera "gamma".

The SMPTE Board of Managers will meet in the Deluxe Boardroom, starting at 4:30 p.m.

Pizza & Pop Dinner provided at 6:15 p.m.
(There will be no break during the presentation)