



**SMPTE**  
**Motion Imaging** *Journal*

**EXECUTIVE**

**Patrick Griffis**  
*Education Vice President*

**Glen Pensinger**  
*Chairman/Board of Editors*

**John Belton**  
**Thomas Edwards**  
**James E. O'Neal**  
*Associate Editors*

**Barbara H. Lange**  
*Executive Director*

**JOURNAL STAFF**

**Joel Welch**  
*Director of Education*  
 914-205-2379

**Dianne Purrier**  
*Managing Editor, Digital and Print Publications*  
 914-205-2377

**Jeffrey Victor**  
*Advertising Manager*  
 847-721-2730

**DEPARTMENTS**

- 2 Officers Page
- 4 SMPTE Sustaining Members
- 6 Message from the Executive Director
- 8 Report from the Standards Vice President
- 10 NAB Show's Future of Cinema Report
- 17 Section Meetings
- 64 SMPTE Almanac

**MAY/JUNE 2016: COLOR AND HIGH DYNAMIC RANGE**

**TECHNICAL PAPERS**

- 24 **How Independent are HDR, WCG, and HFR in Human Visual Perception and the Creative Process?**  
 Sean T. McCarthy
- 34 **The Academy Color Encoding System: Standards for Digital Image Interchange, Color Management and Long-Term Archiving**  
 Andy Maltz
- 40 **An Analysis of System Contrast in Digital Cinema Auditoriums**  
 Miller Schuck and Pete Ludé
- 50 **A Display-Independent High Dynamic Range Television System**  
 Tim Borer and Andrew Cotton
- 57 **How Loud Is a Movie?—A New Measurement Procedure**  
 Ioan Allen

**EXCLUSIVE ARTICLES ONLINE: ABSTRACTS**

- 63 **Modeling of Achievable Contrast and Its Impact on HDR Projection in Commercial Cinema Environments**  
 Claude Tydtgat, Dirk Maes, Goran Stojmenovik, and Augustin Grillet
- 63 **Extended Image Dynamic Range System for UHDTV Broadcasting**  
 Yuichi Kusakabe, Yoshitaka Ikeda, Noriyuki Shirai, Kenichiro Masaoka, Takayuki Yamashita, Yukihiko Nishida, Tetsuomi Ikeda, and Masayuki Sugawara

COVER CREDITS:  
 BACKGROUND IMAGE: ©ISTOCKPHOTO.COM/ANDREY PROKHOROV  
 IRIS: ©ISTOCKPHOTO.COM/DEIMAGINE

Digital Object Identifier 10.5594/JMI.2016.2559598  
 Date of publication: 14 May 2016