

FOUNDED 1916



EXECUTIVE

Peter Ludé
Editorial Vice-President

Glen Pensinger
Chairman/Board of Editors

JOURNAL STAFF

David J. M. Juhren
Director of Communications

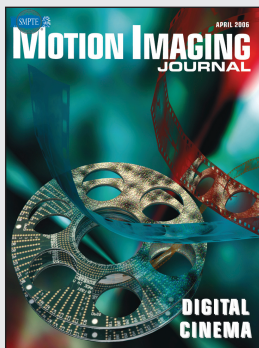
Dianne Ross Purrier
Managing Editor

Mathew V. Kuriakose
Publications/Production Manager

ENGINEERING

Carlos V. Girod, Jr.
Director of Engineering

Mark S. Hyman
Staff Engineer



Printed in the USA

SMPTE
MOTION IMAGING
Journal

APRIL 2006

Website: www.smpte.org

VOL. 115, NO. 4

MESSAGE FROM THE DIRECTOR OF EDUCATION

James W. Edwards II107

SMPTE REPORTS

Remarks from Sandra Sollod Poster108

2006 Lou Wolf Memorial Scholarship109

The SMPTE Student Paper Award110

Section Meetings111

SMPTE Digital Cinema Summit at NAB 2006117

Call for Papers: SMPTE Technical Conference and Exhibition119

SMPTE Almanac by Michael Dolan120

PAPERS

Designing Camera Origination Films for Scan-Only Applications
in Television and Digital Intermediate
David L. Long and Thomas O. Maier121

Aliasing and Reconstruction Distortion in Digital Intermediates
Gabriel Fielding, Ryan Hsu, Paul Jones, and Christopher DuMont128

Digital Cinema Image Representation Signal Flow
John Silva137

Advanced Frame Rate Conversion and Performance Evaluation
P. Blanchfield, D. Wang, A. Vincent, F. Speranza, and R. Renaud153

SMPTE NEWS AND DEPARTMENTS

Professional Services160

News161

Highlighting SMPTE Sustaining Members164

New Products166

SMPTE New and Renewal Membership Application169

SMPTE Sustaining Member List170

SMPTE Sustaining Member Application172

SMPTE Motion Imaging Journal (ISSN: 0036-1682) published monthly by the Society of Motion Picture and Television Engineers, 3 Barker Ave., White Plains, NY 10601. Periodicals postage paid at White Plains, N.Y., and at additional mailing office. Copyright © 2006 by the Society of Motion Picture and Television Engineers, Inc. All rights reserved. Printed in the U.S.A. No part of this issue may be reproduced without written permission of the publisher. Statements and opinions expressed in articles or editorials in the *SMPTE Motion Imaging Journal* are expressions of contributors and do not necessarily represent the policies or opinions of the Society. Advertisements appearing in this publication are the sole responsibility of the advertiser. Subscription rates: SMPTE members, \$27.00 included in membership dues; Straight Subscription U.S., \$140.00; elsewhere, \$155.00; airmail \$195. Single copy, \$15.00 plus shipping. MEMBERSHIP in SMPTE is available according to qualifications at the following annual dues: Active Member, \$135.00; Student Member, \$35.00. All members receive the *SMPTE Motion Imaging Journal* as part of membership. **SMPTE owns the copyrights to all published material, unless otherwise stated.** *SMPTE Motion Imaging Journal* is registered with Canada Post: CPM # 41003019.

POSTMASTER: Send change of address to *SMPTE Motion Imaging Journal*, 3 Barker Ave., White Plains NY10601.