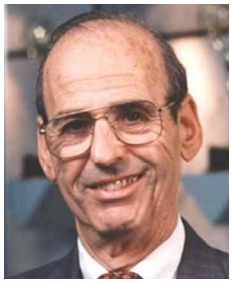
2018 SMPTE AWARDS CEREMONY

The 2018 **Annual SMPTE Awards Gala** will take place on **Thursday, 25 October,** and will feature a red carpet, reception, and dinner in the California Ballroom of the Westin Bonaventure Hotel & Suites in downtown Los Angeles, Calif.

Honorary Membership *is the Society's highest accolade. It recognizes individuals who have performed distinguished service in the advancement of engineering in motion pictures, television, or in the allied arts and sciences.*

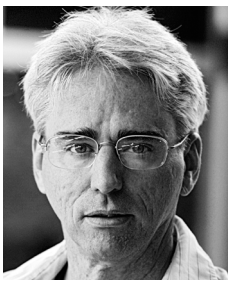


This year, SMPTE honors **Charles A. Steinberg** in recognition of his leadership role at both Ampex and Sony, for more than 45 years where he turned the technical visions of industry leaders into television realities. Steinberg participated in and led engineering/technology and business teams that brought many innovations to the broadcasting field. His efforts included 2-in. tape, 1-in. helical tape, Digital Betacam (commonly referred to as DigitBeta), and HDCAM (standardized as SMPTE 367M, also known as SMPTE D-11). Steinberg has received three Emmy awards for the introduction of HDTV, technical efforts at the XXVII Olympiad, and the prestigious Lifetime Achievement Award. He continues to support the industry's growth as a member of the board of directors to the Plug and Play Tech Center and as a co-founder of EyeIO.

The ***Progress Medal*** *is the most prestigious SMPTE award, and it recognizes outstanding technical contributions to the progress of engineering phases of the motion picture, television, or motion-imaging industries.*

The 2018 recipient is **Craig Todd,** in recognition of more than four decades of innovation in the delivery of digital multichannel sound to the theater and the home, as well as significant contributions to high dynamic range (HDR) imagery and steadfast support of the standards process worldwide.

The ***Technicolor/Herbert T. Kalmus Medal, sponsored by Technicolor, Inc.,*** *recognizes outstanding contributions that reflect a commitment to the highest standards of quality and innovation in motion picture post-production and distribution services.*



Rod Bogart will receive the award for his instrumental contributions to the design, implementation, and deployment of the industry-standard OpenEXR image format, a core enabling technology for high dynamic range (HDR) moviemaking. Bogart also contributed to the development and education of the virtual white point for digital cinema presentation, which allows for the authentic reproduction of filmmakers' creative intent.

The ***Samuel L. Warner Memorial Medal, sponsored by Warner Bros.,*** *recognizes outstanding contributions in the design and development of new and improved methods and/or apparatus for motion picture sound, at any step in the process.*

The award will be presented to **David R. Schwind** in recognition of his contributions in the area of acoustic design. In the creation of a soundtrack, one element that may be overlooked is the acoustic impact of the post-production facilities, the mixing studio, and the scoring stage. Under the general umbrella of acoustic design, reverberation characteristic, decay smoothness, avoidance of specific room resonances, noise control, and sound isolation can all affect what a mixer hears, and how he or she models the soundtrack. For the past three decades, Schwind has been unequaled as an acoustic designer. His projects include post-production facilities at Skywalker Ranch, Pixar, Warner Bros., DreamWorks, Fox, Disney, and Technicolor-Paramount. In addition, his successes have led to design projects across the globe, including StageOne in Australia and TOHO in Japan.

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*The **David Sarnoff Medal, sponsored by SRI International,** recognizes outstanding contributions to the development of new techniques or equipment that have improved the engineering phases of television technology, including large-venue presentations.*

The award will be presented to **Hugo P. Gaggioni** in recognition of his contributions to the development of high-definition television (HDTV), wide color gamut (WCG), high dynamic range (HDR), and the Moving Pictures Experts Group (MPEG) compression systems. Gaggioni has served as session chair of conferences throughout the world in the areas of HDTV and video compression systems. He was chair of the technical groups on SMPTE 260M and 292M standards and worked with manufacturers and broadcasters for the use of HDR techniques in ultrahigh-definition (UHD)/HD production applications. Gaggioni continues to give numerous presentations and courses on signal processing and contemporary video technologies at events around the world sponsored by SMPTE, the Hollywood Professional Association (HPA), IEEE, and Eurasip. He has earned a reputation as an excellent educator of new technologies.

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*The **Workflow Systems Medal, sponsored by Leon D. Silverman,** recognizes outstanding contributions related to the development and integration of workflows, such as integrated processes, end-to-end systems, or industry ecosystem innovations that enhance creativity, collaboration, and efficiency, or novel approaches to the production, post-production, or distribution process.*

Fabrice Bellard is the 2018 recipient in recognition of his foundational and innovative work in creating Fast Forward Motion Picture Experts Group (FFmpeg), one of the most successful open source media projects to date and an essential video and audio learning tool. The creation of FFmpeg provides a working reference architecture for digital video processing and format conversion, a critical component of information technology (IT)-based workflows. Bellard's work has enabled a vast number of viewers to access media on a global scale in consumer products and has enabled countless IT-based digital video productions.

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*The **Digital Processing Medal** recognizes significant technical achievements related to the development of digital processing of content for cinema, television, games, or other related media.*

Tim Borer will receive the award for his significant contributions in the areas of image processing, particularly motion-aware video frame-rate conversion and video compression algorithms, including techniques used in phase correlation-based frame interpolation. Borer led the video compression team that developed the Dirac Pro compression system that subsequently became the SMPTE VC-2 standard. Most recently, Borer led the development of the Hybrid Log-Gamma (HLG) HDR television system. He holds 20 patents in the field of digital video processing.

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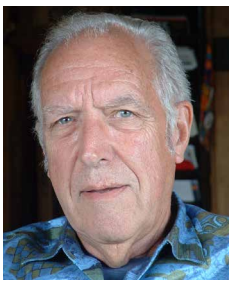
*The **Camera Origination and Imaging Medal Award** recognizes significant technical achievements related to invention or advances in imaging technology, including sensors, imaging processing electronics, and the overall embodiment and application of image-capture devices.*



Robert Neuhauser is the 2018 recipient, for his innovation and leadership in the development of and contributions to the literature on imaging devices, particularly television camera tubes, for more than six decades.

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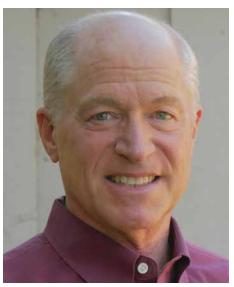
*The **James A. Lindner Archival Technology Medal Award, sponsored by James A. Lindner,** recognizes significant technical advancements or contributions related to the invention or development of technology, techniques, workflows, or infrastructure for the long-term storage, archive, or preservation of media content essence.*



Robert J. Heiber will receive this award in recognition of his contributions to the preservation and restoration of motion picture and television sound. In addition to creating technologies and methodologies for the recovery of legacy motion picture soundtracks and television programs, Heiber has created numerous programs to educate audio scholars on the history, protection, and restoration of moving image sound and its importance. He has an outstanding record of teaching, lecturing, and advocating for the technology of media sound preservation at the academic and governmental level worldwide.

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*Each year, one **SMPTE Journal Award** is presented to the author of the most outstanding paper originally published in the SMPTE Motion Imaging Journal during the preceding calendar year.*

The SMPTE Journal Award will be presented to **Sean T. McCarthy** for the article "A Biologically Inspired Approach to Making HDR Video Quality Assessment Easier," published

in the May/June 2017 issue of the *SMPTE Motion Imaging Journal.*

As the Director of Video Strategy & Standards, McCarthy explores innovations, new use cases, and core technology standards that help Dolby transform storytelling, and produce new experiences that unleash the potential of entertainment and communications.

McCarthy brings a unique convergence of expertise in signal processing and the neurobiology of human vision to digital video and entertainment technology. Before joining Dolby, he drove advancements in state of the art of video processing, compression, and practical vision science as a Fellow at ARRIS. He held similar responsibilities as Fellow of the Technical Staff at Motorola and as Chief Scientist at both Modulus Video and at ViaSense, a University of California at Berkeley spin-off that developed commercial applications of the human visual system.

McCarthy has published many papers in the fields of video processing and applied vision science, and has over two dozen issued U.S. and international patents. He earned a BS in physics from Rensselaer Polytechnic, and earned a PhD in bioengineering jointly from the University of California at Berkeley and the University of California at San Francisco.

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*Two **Journal Certificates of Merit** will be presented to the following:*

Jacyln Pytlarz, Elizabeth Pieri, and Robin Atkins for the article "Objectively Evaluating High-Dynamic-Range and Wide-Color-Gamut Color Differences," published in the March 2017 issue of the *Journal.*

Jaclyn Pytlarz is a senior engineer of Applied Vision Science at Dolby Laboratories in Sunnyvale, Calif., where she has been working inside the Dolby's Advanced Technology Group since 2014. Her research includes vision science surrounding technologies for high dynamic range and wide color gamut displays. Her focus is developing color mapping and displays management algorithms to help maintain consistent imagery on a wide variety of displays. She holds a BS degree in motion picture science from the Rochester Institute of Technology and is currently pursuing her MS degree in computational and mathematical engineering at Stanford University. She has previously been awarded the IET Best Young Professional Award and the TVNewsCheck Technology Woman to Watch Award and is currently serving as an Education Director for SMPTE.

Elizabeth Pieri is an engineer on the Imaging Applied Research Team at Dolby Laboratories. Her research focuses on vision science as it relates to high dynamic range (HDR) and wide color gamut (WCG) display technologies. She received a BS degree in motion picture science from the Rochester Institute of Technology in 2016. During her studies, she completed an internship at the Library of Congress, where she developed software for measuring the color accuracy of digitized images.

Robin Atkins' career in imaging science began while designing HDR displays at Brightside Technologies. These displays revealed a fascinating host of new challenges in perception and color appearance, in which he is now working to address as the manager of the Applied Vision Science Group at Dolby Labs. Atkins' current focus is on designing algorithms for mapping HDR and WCG content to the multitude of endpoint displays that we use every day. He has degrees in engineering physics and electrical engineering.

Nikolaus Kerö, Thomas Kernen, and Tobias Müller for the article "Efficient Monitoring of ST 2059-2 Based Time Transfer Performance," published in the digital edition of the May/June 2017 issue of the *Journal.*

Nikolaus Kerö received a master's degree in communication engineering with distinction from the Vienna University of Technology, after which he led the ASIC Design Division at the university's Institute of Industrial Electronics, successfully managing numerous research projects and industry collaborations. His research activities centered on distributed systems design, especially highly accurate and fault-tolerant clock synchronization. In 2001, he co-founded Oregano Systems Design & Consulting Ltd., as a university spin-off. As well as offering embedded systems design services to customers, Oregano transferred research results into a complete product suite for highly accurate clock synchronization under the brand name syn1588, for which Kerö manages both development and marketing. He is an active member of the IEEE 1588 standardization committee and the SMPTE 32NF standards group and holds

frequent seminars on clock synchronization both for industry and academia.

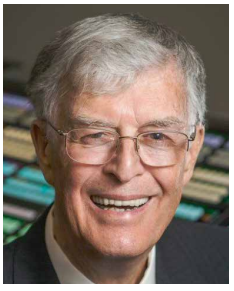
Thomas Kernen is a staff software architect at Mellanox. His main area of focus is defining architectures for transforming the broadcast industry to an All-IP Video infrastructure. He is a member of the IEEE Communications and Broadcast Societies and SMPTE. Kernen has also served for seven years as the editor of the Digital Video Broadcasting (DVB) for the TS 101 154 "Specification for the use of Video and Audio Coding in Broadcasting Applications based on the MPEG-2 Transport Stream" supported by millions of digital receivers worldwide. Additionally, he has authored over 20 publications in leading journals, holds six patents that cover both network and video coding optimizations for media transport and delivery. Kernen is a frequent speaker at leading events such as the SMPTE ATC, NAB show, IBC, and EBU Network Technology Seminar. Prior to joining Mellanox, Kernen spent more than 20 years in the IP industry including driving Cisco's entry into live media production, co-founding Internet Service Providers, Telecom carriers and architecting Fiber to the Home networks.

Tobias S. Müller received a bachelor's degree in electronic engineering and a master's degree in embedded systems from the University of Applied Science in Vienna. In 2013, he obtained a master's degree for his thesis "Optimization of the Control Algorithm for an IEEE 1588 Precision Time Protocol Engine," which focuses on his main field of expertise: clock synchronization in distributed, asynchronous computer systems. He is currently employed by Oregano Systems as software and system engineer and works on complex projects in the field of high-precision clock synchronization. In 2014, Müller started his second master's degree program in software engineering. He is working on his master's thesis on automatic error detection and correction in large clock synchronization networks.

*The **Presidential Proclamation** recognizes individuals of established and outstanding status and reputation in the motion picture, television, and motion-imaging industries worldwide.*

This year's recipients are **Phil Laven** and **John Ross**.

Phil Laven will receive the award in recognition of his significant contributions to the broadcast industry. His wide-ranging career at the BBC between 1966 and 1997 included serving as chief engineer R&D and controller of engineering policy, making him instrumental in leading the BBC's policy on many technical initiatives, such as development and implementation of digital television and radio broadcasting in the U.K. In recognition of his contributions, he was awarded an Officer of the Most Excellent Order of the British Empire (OBE). Between 1997 and 2007, he was the director of the European Broadcast Union (EBU) Technical Department based in Geneva. From 2008 to 2016, Laven chaired the Digital Video Broadcasting (DVB) Steering Board. He also served as chair of the European Telecommunications Standards Institute (ETSI)/EBU Joint Technical Committee on broadcasting for 14 years and took on numerous other roles, such as chair of the Future of Broadcast TV initiative and treasurer of the WorldDAB Forum.



John Ross will receive the award in recognition of his pioneering work in the development of production switchers, signal processing, chroma keying, and analog and digital systems design. In 1955, while still a teenager, he created an advanced vacuum-tube production switcher with wipes and keys, the first of its kind in Canada. In 1963, Ross founded the broadcasting equipment division of Central Dynamics Ltd. where he built the world's first entirely solid-state production switcher and was granted a fundamental patent for the first chroma keyer to enable remote selection of any background color, rather than just blue. This invention led directly to the use of the green screen. He founded Ross Video Ltd. in 1974, where he developed a series of production switchers incorporating many revolutionary features now in common use. He also developed the first card-based high-quality 10-bit digital 4:2:2-to-analog encoder and decoder, which were selected by NASA for use on the International Space Station. Ross is also known as a great mentor of engineers, with industry leaders counted among his students. He is a SMPTE Fellow, Officer of the Order Canada, and was awarded Honorary Membership by IABM.

*The **Excellence in Standards Award** recognizes individuals or companies that have been actively involved in advancing the Society's standards activities and processes.*

S. Merrill Weiss will receive this award in recognition of more than four decades of participation and more than three decades of leadership in the development of SMPTE standards. Weiss has served in the Society's Standards Community continuously for over 40 years and has led many of the Society's most important standards efforts, including the development of the component digital video production standards, the Archive eXchange Format (AXF) standards, and the underlying framework on which today's digital video workflows are based. In addition to his technical contributions, Weiss is a SMPTE Fellow and has mentored many SMPTE Technology Committee (TC) participants who later made significant contributions to the Society's work. He has written extensively about SMPTE's standards efforts, explaining their value and utility to working engineers and practitioners throughout the industry.

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*The **Citation for Outstanding Service to the Society**, which recognizes individuals for dedicated service for the betterment of the Society over a sustained period, will be conferred upon two SMPTE Members:*

Charles Reti is recognized for his more than 20 years of contribution to the Detroit Section as a Manager, Membership Chair, Secretary/Treasurer, and more than a decade as a Section Chair. He has worked to keep the Detroit Section active by developing monthly programs and providing enduring leadership.

Peter Stavrianos will receive this award for his decade of contributions to the Australia Section, especially the SMPTE Australia Conferences in 2013 and 2015. For the 2013 conference, Stavrianos was the chair of the Conference Papers Committee and produced a program with two tracks, 16 sessions and 52 presentations over four days. He instituted changes to make the conference more accessible for attendees and engaged students in the conference production. He continued to support the Section by training others to continue in his footsteps.

***The Louis F. Wolf Jr. Memorial Scholarship** is designed to assist students in furthering their undergraduate or graduate studies in motion pictures and television, with an emphasis on technology.*

The 2018 scholarship will be awarded to **Grace Annese, Angie Urbina**, and **Jake Zuena.**

Grace Annese is a senior in the Motion Picture Science (MPS) program at the Rochester Institute of Technology (RIT). She started college at the University of Pittsburgh as a film major, and later transferred into the MPS program at RIT, which covers all her areas of interest. This past summer she was an engineer intern at Technicolor Postmarks in New York City and got the opportunity to see the faster-paces post-production environment. Annese is currently working on her senior thesis, which involves creating and analyzing an HDR workflow for the film students at RIT.

Angie Urbina was born and raised in Los Angeles, Calif. She is currently a student at Pasadena City College in the television program. Urbina is an intern at Pasadena Media and served as SMPTE Student Chapter Chair in 2017. Her goal is to flourish by working hard, working smart, and sharpening her skills so that one day she can earn a job in the television and film industry. Her imagination has provided her with endless ideas to create magic and adventures like the ones she has seen in films and television.

Jake Zuena is currently a fourth-year student at RIT, studying Motion Picture Science. Throughout the course of his education, Zuena has developed a strong interest in the topics of color science and how they incorporate both scientific and creative interpretation. He is currently performing a senior research project to assess the creative use and perception of highly saturated colors in WCG-compatible color spaces. He recently completed an internship with Warner Bros. Studios as an Emerging Technology Intern for Color and Imaging Science. While there, he assessed whether televisions were UHD compatible and analyzed performance differences between manufacturers, models, and identical displays. At RIT, Zuena works as a teaching assistant for the introductory

motion picture science course. Zuena is also an active member of RIT's SMPTE Chapter. He currently serves as the chapter's president, after performing the role of secretary during both his sophomore and junior years. As a part of this chapter, Zuena enjoys crafting meetings and activities with an educational value.

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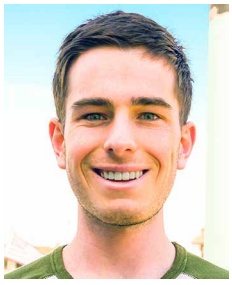
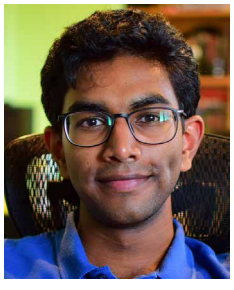
*The **Student Paper Award** recognizes the outstanding paper prepared and submitted by a Student Member.*

The paper receiving the Student Paper Award will be published in the *SMPTE Motion Imaging Journal*.



Jason Ginsberg and **Neil Movva** are recipients of the 2018 award for their paper "Dynamic Field of View in a Tomographic Light Field Display."

Jason Ginsberg is a rising senior at Stanford University, pursuing a bachelor's degree in electrical engineering and a master's degree in computer science. His work with Neil Movva on light-field displays was funded by Rabbit Hole VR, an on-campus student organization, and advised by Prof. Gordon Wetzstein of the Computational Imaging Lab. Ginsberg has also been recognized by Andreesen Horowitz, Kleiner Perkins Caufield & Byers, The American Scholastic Press, The National Young Arts Foundation, as well as MOMA PS1 for his work outside engineering in industrial and graphic design. This summer he worked at Visby, a startup building tools for the creation, manipulation, delivery, and consumption of light-field video content.



Neil Movva is a senior at Stanford University, majoring in electrical engineering. He studies computer architecture with a focus on accelerated visual computing. His current research interests include computational imaging and deep networks for visual recognition. His goal is to experiment with the imaging pipeline to enable ubiquitous machine vision. Outside of class, he competes in student engineering challenges with the Stanford Robotics team, where his focus shifts to board-level electrical engineering (especially, high-power systems). In the future, Movva hopes to one day lead a processor design team, architecting the engines that drive massive-scale visual understanding.

Emily Faw will receive an Honorable Mention for her paper "What Does a High Dynamic Range Mean: Creating a High Dynamic Range Workflow for Film Students."

Faw is a recent graduate of the Rochester Institute of Technology's Motion Picture Science Program. In July, she started working at Technicolor in their Color Science Department as a Color Science Technician. She was a recipient of the 2017 Louis F. Wolf Jr. Memorial Scholarship. Her senior project paper on creating an HDR workflow at the film school level was honored this year. Faw's interests include image processing, post-production, and emerging technologies (specifically HDR). She has been a member of SMPTE since her sophomore year in college.

Catherine Meininger also will receive an Honorable Mention for her paper "Determining Visibility Thresholds for Spatial and Spatiotemporal Chromatic Noise."

Meininger is a recent graduate of RIT with a BS degree in motion picture science. Though her main interests originated in audio and video post-production, Meininger developed a passion for the perceptual side of the industry and focused her studies on color science and psychophysics. Her senior thesis was in collaboration with researchers at ARRI, where she studied the visibility of chromatic noise in still and moving imagery. In addition to her classes, Meininger was an active member of RIT's SMPTE Student Chapter and served as president of the organization her senior year. In 2017, she was a recipient of the SMPTE Louis F. Wolf Jr. Memorial Scholarship. During her last semester at RIT, Meininger was an intern at Portrait Displays Inc., and upon graduation accepted a full-time position as a color scientist for the company.