

CONVENTION REPORT

135TH AES CONVENTION

**Jacob Javits Center
New York City, USA**

October 17–20, 2013

135TH
AUDIO ENGINEERING SOCIETY
INTERNATIONAL CONVENTION

JACOB JAVITS CENTER
NEW YORK CITY
CONFERENCE
Oct. 17–20, 2013

Exhibit Hours

Friday, October 18
10:00 am – 6:00 pm

Saturday, October 19
10:00 am – 6:00 pm

Sunday, October 20
10:00 am – 4:00 pm

The 135th Convention at the Javits Center in New York was the place to be if you have anything to do with the audio industry. The exhibit floor, panels, and technical sessions were jammed with visitors from October 17th through 20th, and as AES celebrated its 65th Anniversary a five-year-high number of 18,453 registrants was tallied. By the time the show closed, a 16% increase in registration had been recorded since the last time the convention was in New York two years ago, which represented a staggering 71% increase over last year's San Francisco event, which unfortunately was plagued by smaller attendance due to Hurricane Sandy.

Jim Anderson, chair, and his convention committee created the most ambitious and comprehensive schedule of sessions in AES convention history; AES135 will be remembered by those in attendance as an exciting and enlightening experience, and one of the most heavily attended conventions in years.

"I can't express how thrilled I am with our convention this year," enthused Bob Moses, executive director of the AES. "Our organizing committee really outdid themselves, with over 250 presentations from an astounding 682 leading researchers and practitioners, with many sessions standing-room only. The convention floor was absolutely packed, and the only complaint I heard was that we ran out of convention programs on the second day

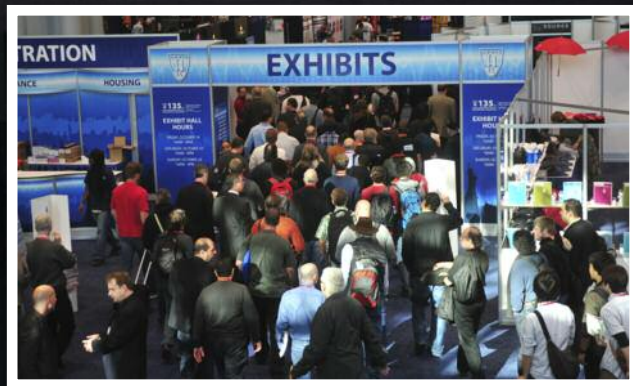


WELCOME TO THE 135TH AES CONVENTION
REGISTRATION AND EXHIBITS

135TH
AUDIO ENGINEERING SOCIETY
INTERNATIONAL CONVENTION

JACOB JAVITS CENTER
NEW YORK CITY
CONFERENCE
Oct. 17th - 20th, 2013

Use our **FREE** mobile app to navigate the show floor, build a calendar of technical sessions, or follow the **#AESorg** conversation on Twitter.



because so many people showed up. We took some risks with this show in an attempt to bring in lots of new blood and to maintain our position on the proverbial cutting edge, and the fact that it was such a fantastic success gives us confidence to ratchet it up a few more notches in Los Angeles next year. Actually, why wait for October 2014?—we'll be back in Berlin in April, and much of what made this show so great will be leveraged to breathe new life into our European convention."

No matter what sector of the industry you are involved in—recording and production, broadcast and streaming, game audio, live sound, networked audio, sound for picture, post production, or system integration—AES135 had it all. The convention received support from over 20 industry sponsors and partners including: Audio Precision, Cerwin-Vega, CharterOak, Focusrite/Novation, Gibson, Hal Leonard, Harman/Soundcraft, iZotope, KRK, NewBay Media, Onkyo, SAE Institute, Sennheiser, Sound On Sound, Sound and Picture, Stanton, Tascam, and THAT Corporation. Additionally several organizations lent their support, including APRS, ASCAP, DTV Audio Group, International Music Festival Conference, Manhattan Producer's Alliance, the Recording Academy Producers & Engineers Wing, and SPARS, as well as leading audio retailers GC Pro and Sweetwater.

OPENING CEREMONY AND AWARDS

Launching a standing-room-only opening ceremony, Bob Moses, executive director, was excited to welcome everyone to the 135th Convention, which had topped a five-year high for preconvention registrations. He offered his particular thanks to the staff, which had truly gone the extra mile in preparation for this event, and he expressed his hope that everyone present would have an "awesome weekend." Following Moses onto the stage, AES president Frank Wells reminded the assembled company of this being the 65th anniversary of the Society's founding, thanking the convention committee, sponsors, and exhibitors for bringing the whole event together. Convention chair Jim Anderson played some number games on the theme of 135 during his opening presentation, explaining among other things that Steely Dan apparently went through 135 guitars when recording the album *Aja*. "Make the most of it!" he encouraged the visitors who traveled from around the world.

Jim Kaiser was chair of the Awards Committee on this occasion, and it was his pleasure to recognize those who had made outstanding contributions to the field of audio or to the AES. A summary of the awards presented is given in the sidebar.

KEYNOTE

"Humans infer many important things about the world from the sound pressure waveforms that enter the ears," explained MIT professor Josh McDermott during his enlightening keynote address. Tackling the use of sound synthesis as a way of testing theories of hearing, McDermott took the audience on a whistle-stop tour of his research, including numerous informative



Bob Moses



Frank Wells



Jim Anderson



Jim Kaiser

AES AWARDS AT THE 135TH

GOLD MEDAL

RUDY VAN GELDER in recognition for creating the legendary sound of jazz during six outstanding decades of recording.

SILVER MEDAL

LAURENCE FINCHAM in recognition for a sustained series of significant contributions to electroacoustics and signal processing in the area of domestic sound reproduction.

BOARD OF GOVERNORS AWARD

WILLIAM CRABTREE in recognition of co-chairing the 50th International AES Conference "Audio Education" in Murfreesboro, TN, USA, on July 25–27, 2013.

MICHAEL FLEMING in recognition of co-chairing the 50th International AES Conference "Audio Education" in Murfreesboro, TN, USA, on July 25–27, 2013.

MICHAEL KELLY in recognition of his chairing the 49th International AES Conference "Audio for Games" in London, UK, on February 6–8, 2013.

JIM MCTIGUE in recognition of co-chairing the 133rd International AES Convention in San Francisco, CA, USA, on October 26–29, 2012.

JAN ABILDGAARD PEDERSEN in recognition of his chairing the 48th International AES Conference "Automotive Audio" in Munich, Germany, on September 21–23, 2012.

VALERIE TYLER in recognition of co-chairing the 133rd International AES Convention in San Francisco, CA, USA, on October 26–29, 2012.

UMBERTO ZANGHIERI in recognition of his chairing the 134th International AES Convention in Rome, Italy, on May 4–7, 2013.

FELLOWSHIP AWARD

THERESA LEONARD for her professional achievements and dedication to the Audio Engineering Society and to its education initiatives.

JOEL A. LEWITZ for contributions to the design of electroacoustics systems in architectural spaces, teaching and mentoring within the industry, and long association with the AES.

TIMOTHY SHUTTLEWORTH for significant contributions to digital audio product design and many years of service to the AES.

CITATION AWARD

BOZENA KOSTEK in recognition for her outstanding efforts as Editor to improve the quality, responsiveness, and impact of the AES Journal.

HONORARY MEMBER

RONALD E. UHLIG in recognition of his pioneering engineering achievements to enhance the film sound experience for the audience, including the development of international standard setting technology that allowed stereo variable area soundtracks to replace monaural film sound, and later, the development of digital data read/write capability for 35mm digital audio.

135TH CONVENTION AWARDS PRESENTATION



From left, Brett Leonard and Bozena Kostek present Teemu Koski and David Romblom with Best Student Paper Awards.



Yoshito Sonoda and Toshiyuki Nakamiya (left) and Esben Skovenborg (right) receive the Best Peer-Reviewed Paper Awards.



Gold Medal Award,
Rudy van Gelder



Silver Medal Award,
Laurie Fincham



Board of Governors Awards: from left, Michael Fleming and Bill Crabtree and Michael Kelly



Board of Governors Awards: from left, Jim McTigue and Valerie Tyler, Jan Abildgaard Pedersen, and Umberto Zanghieri



Fellowship Award:
Theresa Leonard



Fellowship Awards: Joel Lewitz (left) and Tim Shuttleworth



Citation: Bozena Kostek



Honorary Membership:
Ron Uhlig

audio examples. He's interested in the way that certain sound textures such as water, wind, applause, and rain can be described by statistics. Such sounds have a relatively stationary quality that doesn't change a lot over the long term, but they have short term "broadband events" that are correlated between frequency channels in a spectrogram, such as the crackles in fire sounds. Basic synthesized noise spectra attempting to emulate these sounds don't sound much like the real thing, but when temporal statistics are added they become more realistic. Listeners also get better at identifying them over longer excerpts because the statistics tend to converge. Perhaps the brain is mainly working on the statistics and throwing away the detail, he suggested. Certain sounds

seem to be synthesis disasters, Josh explained, and they are also poorly identified by hearing models, which suggests the brain is recognizing something that the model is not. These sounds point the way to a better understanding of the way in which the brain distinguishes other-wise similar sounds.

Josh McDermott,
convention keynote speaker



EXHIBITION

The convention garnered praise from its exhibitors. As Piers Plaskitt, CEO of Solid State Logic stated, “We went into the 2013 AES with high expectations, a new console for the live market, a cool summing box for our music professionals, and a MADI/Dante bridge for our broadcast customers. We staffed up accordingly, and I’m very pleased to say that we had an extraordinarily busy show that exceeded our projections on every level. We are looking forward to 2014 and the convention’s return to Los Angeles.”

“This AES in New York was the best AES convention in many years,” said Eric Mayer, President of DPA. “This year the show floor traffic seemed up, our booth attendees were more qualified, and spirits seemed high. I’m not sure what changes were made, but whatever they were, they were needed and they worked.” Katy Templeman-Holmes, senior marketing manager USA of Harman’s Mixer Group, echoed Mayer’s words: “We had a great show, specifically with the hands-on workshops we hosted. Attendance was stronger than ever and it was a valuable mix of students and new and veteran engineers all looking to learn and experience the available technologies and products. A good show all around.”

Among the new product launches at the show, Sony brought out its PCM-D100 high-resolution portable recorder, replacing the previous D50 model. This one includes 192 kHz, 24 bit, and DSD options, better stereo microphones, and a five-second pre-record buffer so you don’t miss those all important events. On the recording side of things, Tascam unveiled a successor to its legendary DV-RA1000HD studio recorder in the form of the DA-3000. The new machine is sleeker and more modern-looking with upgraded preamps, and will run at 192 kHz or even do DSD at 5.6 MHz. There’s no fan, which keeps things quiet in the studio.

In the microphone domain, Lewitt introduced two new MTP Live Series models—the dynamic MTP 840 DM and the condenser MTP 940 CM. The latter can be switched between three polar patterns: wide cardioid, cardioid, and super-cardioid, as well as having remarkably low self-noise of 9 dB. AEA also brought in a new model in the shape of the N22 phantom-powered ribbon microphone, which is so highly protected it can be used in live applications without a pop filter. Marking its 10th anniversary, Lipinski Sound launched a new self-powered, upgradable loudspeaker system—the revised L-707A family of monitors.

Avid introduced a significant new addition to its family of control surfaces, in the form of the S6. The S6 can control multiple Pro Tools or other DAW systems using the EuCon protocol originally developed by Euphonix, and it can be customized in modular fashion so that it can be adapted to different workflows or growing needs. Calrec Audio’s Callisto was another important new console, designed specifically for live broadcasters. A 17-inch touchscreen enables the user to control the mixer using familiar tablet-like gestures, and the whole thing is designed with power efficiency and ease of maintenance in mind. Emphasizing the live sound theme of the convention,

SSL brought out its new Live console aimed at FOH and stage monitoring sound production. It’s based on the company’s new Tempest processing platform and can have as many as 976 inputs with 192 processing paths working at



A birds-eye view of the exhibition floor

96 kHz. As with the Calrec mentioned above, the Live also uses tablet-like multitouch gestures on a touchscreen for many aspects of operation, along with more conventional hardware controls. Lawo showed a number of new improvements to its mc2MKII production console, including dual operator control, improved ergonomics, multirow metering, and an Automix function. There’s an increase in DSP power and full support of RAVENNA networking too.

Reinventing the idea of “mixing in the box,” API fought back against the current tendency to mix everything inside a DAW with its new “The Box” analog console, aimed at smaller operations that might be tracking, say, three or four tracks at a time. There are two input channels with mic/DI/line preamps, and another two channels in which various 500-series modules can be installed for EQ. In all 20 summing inputs are available during mixing. There was also a launch at AES for Yamaha and Steinberg’s joint venture, the NUAGE, claimed to be the first truly networkable recording system.

PROJECT STUDIO EXPO

AES has a long history of serving the recording community, from the early days of monophonic vinyl to today’s modern multichannel digital audio formats. With the rise of project studios, home recordists



Delegates listen intently during Project Studio Expo session.

can be at a loss as to how best to use the tools at hand. The Project Studio Expo brought together the top people, tools, and techniques, in order that attendees could learn best practices and tricks from the pros, talk to their toolmakers, and connect with their peers. Topics ranged from acoustics in small spaces to microphone placement, mixing, and mastering.

This second annual Project Studio Expo, presented in association with Sound On Sound, witnessed outstanding attendance of over 1,000 people, with presentations by leading industry authors, journalists, and educators, such as Craig Anderton, Bill Gibson, Mike Metlay. Project Studio Expo was sponsored by Cerwin-Vega, Focusrite/Novation, Gibson Brands, KRK Systems, Onkyo, SAE Institute, Sennheiser, Stanton, and TASCAM. Craig Anderton also hosted a question-and-answer session on Friday with five-time GRAMMY Award winner and renowned record producer, songwriter, musician, and entrepreneur Jimmy Jam.



Visitors through the aisles of the exhibition

Bob Moses, AES executive director, explained that “the Project Studio Expo is our answer to a recording business that has migrated from the classic big studios of the past to the spare bedrooms and garages of the present. Audio professionals need training on a huge range of skills to run their business today, and AES was there to provide that training.” “AES NY is always special, as no other show draws such a diverse crowd of key decision leaders in music, post, broadcast and live sound,” said Phil Wagner, president of Focusrite Novation. “This year’s AES show had our booth and sound demo room packed with potential customers from start to finish. We were proud to sponsor both the Project Studio Expo and the Networked Audio Track. We look forward to a strong presence at AES Los Angeles next year.”

SYSTEMS SOUND SYMPOSIUM

Another first at the 135th, the SCN Systems Sound Symposium provided AV integrators and consultants with an opportunity to learn from leaders in the sound installation market. This day of panel sessions had been finely tuned to offer real-world experience and practical knowledge on the most pertinent AV business and technology trends of today. Four panel discussions addressed the opportunities and issues affecting business growth and profitability in the near and long term. These included “Loud and Clear” on intelligibility measurement and “AV/IT Convergence” on the practicalities of networked audio in permanent installations. AV integrators and consultants benefited from a whole day’s program featuring relevant topics with compelling speakers that are changing the commercial audio business.

DTV AUDIO GROUP FORUM

Another highlight of the show, the DTV Audio Group Forum explored the opportunities and challenges presented by advanced encoding schemes and debated whether ubiquitous mobile and over-the-top content delivery demands a retrenchment to more limited audio or could lead to further audio advances. Explaining the current situation, Roger Charlesworth, executive director of the DTV Audio Group, said “the transition from traditional broadcasting to a largely stream-based model opens up a lot of possibilities but potentially adds to confusion as different entities pursue a range of formats and encoding solutions. The demand for more sophisticated interactive and object-oriented services on next-generation streaming appliances, and the transition to streaming of highly sophisticated cinema formats at the very high end, are directly at odds with the common perception that television audio now needs to be dumbed down for mobile and desktop streaming. This disconnect between competing visions creates a strategic dilemma for content producers who are looking for universal delivery standards and workflow practices across a range of delivery platforms.”

The Forum addressed the long-term implications of mobile data’s inevitable annexation of available broadcast spectrum and the resulting impact on wireless production and revisited the challenges of producing multichannel music for television.

KNOWLEDGE CENTER SEMINARS

The AES is many things, but perhaps first and foremost it is where the broad worldwide audio community comes together to share knowledge and promote a healthy evolving industry. Many forums exist at an AES convention for sharing knowledge in the technical program—the research papers, workshops, tutorials, master classes, and so forth. Although the AES tries to limit commercial presentations within the technical program, for reasons of balance



A Knowledge Center event with Jimmy Douglas attracts a rapt audience.

and impartiality, that doesn’t mean commercial presentations are unwelcome at AES conventions. Many businesses and their employees have important knowledge to share with their customers and other members of the audio community. The Knowledge Center was introduced as a forum where these companies could share information on essentially any subject, including product information, demonstrations, product training, and general applications training. The Knowledge Center is an evolution of the previous exhibitor seminars and last year’s audio industry seminars. Knowledge Center presentations do not require peer review or an invitation to present and the commercial restrictions in the technical program do not apply, though presenters are encouraged to keep their presentations as information-rich as possible in the spirit of AES events.

Here at the 135th, a full program of Knowledge Center events filled the space from Friday to Sunday, including a strong presence from PMC with its Masters of Audio series and seminars from companies such as iZotope, Soundcraft, Ableton, and Lectrosonics. A highlight in PMC’s Masters of Audio series on Saturday afternoon was the presentation by Young Guru on “The Era of the Engineer.” Revered as “The Sound of New York,” Young Guru (Jay Z, Alicia

Keys, Rihanna, Beyoncé) possesses over a decade of experience in sound engineering and production for the acclaimed Roc-A-Fella Records and Def Jam Recordings. Guru examined the recent emergence of a new generation of do-it-yourself engineers, analyzing and demonstrating what it means for the culture at large.



Jim Anderson discusses surround jazz recording with Jane Ira Bloom in a PMC Masters of Audio session.

SPECIALIZED STREAMS TARGET KEY AUDIENCES

A number of themed tracks were used to guide delegates with particular interests through the plethora of events taking place in the technical program, including broadcast and media streaming (David Bialik), live sound (Henry Cohen, Mac Kerr),



Emmy award-winning engineers, Bob Bronow and Josh Earl, explain the challenges of reality TV sound for the Deadliest Catch

network audio (Tim Shuttleworth), product design (Dan Foley), and recording and production. The sound for picture track (Brian McCarty) was very popular, with standing-room-only crowds in many of the sessions. Most audio produced today is associated with pictures, it was explained, including television, cinema, Internet, streaming broadcasts, and mobile. The sound for picture track explored emerging trends in 3-D, large-room reproduction systems, and acoustics and techniques employed by some of Hollywood's top sound mixers and designers. A series of master-classes was presented including dialog editing and mixing, music production, and sound design for film.

The game audio track (Steve Martz) brought its usual large crowd of followers. Possibly the most technologically advanced and fastest growing segment of the audio field, game audio brings together signal processing complexity, evolving requirements, and mass market appeal. AES has been on top of this exciting field since its infancy and the game audio track at the 135th Convention delivered the latest technologies, developers, and ideas, including sessions on "Scoring Tomb Raider" and a post mortem into Diablo III which took a look behind the curtain with the audio team showing the world of game audio development the perspectives of the audio director, sound designer, and composer.

HEYSER LECTURE

A capacity crowd met on the first evening of the convention to hear four-time Grammy award-winning engineer and producer George Massenburg talk on the enigmatically titled subject "4-44 and Me—Stagnation to Transformation: The Real Future of Music." While technology has made music production more accessible, he said, it has also affected the quality as there is no longer the almost mandatory quality control undertaken by experts. Now that anyone can release recorded music on the world, without always needing the expensive structures of record companies, there is an

immense opportunity in front of us, Massenburg said. Education is the key to maintaining high standards as it still takes a lot of practice to become an expert in something, no matter what your innate talent. As Malcolm Gladwell points out, said George, "Talent is

important, but achievement is talent plus preparation." There's no road map for those hoping to understand possible future roles in music as a profession—it's still evolving. But there is hope. Music is a part of all cultures around the world. It takes on different forms and is constantly changing—developing in new directions. These fundamental facts are the best proof of the importance of music to mankind.

Massenburg was presented with a certificate of recognition and a copy of Richard Heyser's AES anthology on time-delay spectrometry by Francis Rumsey, chair of the Technical Council, together with Bob Schulein and Michael Kelly, vice chairs (see photo at left).



The game audio sessions consistently attracted large crowds, as seen in this workshop on breakthroughs for HTML5 and mobile.



From left, Michael Kelly, Bob Schulein, Heyser Lecturer George Massenburg, and Francis Rumsey.



Alex Case presents one of his popular "FXpertise" sessions.

WORKSHOPS AND TUTORIALS FOR ALL

Natanya Ford had coordinated a total of 31 workshops and 23 tutorials over the four days of the convention, covering topics spanning the entire range of audio engineering interests. These included many of the events that made up the themed tracks mentioned above, as well as master classes arranged by Alan Silverman.

On Thursday, for example, Alan Trevena chaired a session on applications of 3-D audio in automotive, looking at advanced spatial rendering in cars and asking questions about what the reference experience should be and how systems can be evaluated. The 3-D theme was continued in a variety of ways throughout the convention, including a series of "workshops with height" held at New York University, which allowed ten concurrent demo sessions to be set up. These included various presentations by Auro 3D representatives, recordings by NYU

and McGill students, and a demonstration of recording with height by David Bowles and Paul Geluso. 10.2-, 9.1- and 16.2-channel speaker arrays were all represented.



From left, Mac Kerr and Henry Cohen (live sound), Jim Anderson (convention chair), Brett Leonard (papers), and Michael McCoy (facilities chair)



From left, Brian McCarty (sound for pictures), Natanya Ford (workshops and tutorials), and Michael Kelly



Giovanni Lobato (facilities assistant), left, and Michael McCoy (facilities chair)



From left, Alan Silverman (master classes), David Bialik (Broadcast Sessions), and Steve Martz (game audio)



David Merrill (tech tours), Tae Hong Park (papers), Tim Shuttleworth (network audio)



David Forshee (facilities Assistant), Dan Foley (product design), Harry Hirsch (historical events)

AES THANKS THE 135TH CONVENTION COMMITTEE



John Krivit (left) and Colin Pfund (students/careers)



Student volunteers with their coordinators, Rebecca Yuri Feynberg and Adrian Tregonning



Ace DJ and Berklee professor Stephen Webber struts his stuff on the turntables in "The Art of the DJ."



Broadcast panelists with David Bialik (right), broadcast sessions chair

Alex Case presented a fascinating series of "FXpertise" tutorials on compression, EQ, and distortion, followed by panels of industry experts discussing their unique takes on the design and use of these ubiquitous effects processes. Among the panelists in the EQ session were Saul Walker discussing his design philosophy on the API series of EQs, George Massenburg on the GML parametric systems, and Nir Averbuch of Sound Radix on the latest frequency-tracking plug-in EQs that can follow the formants of vocals, for example.

"Can we measure emotions?" asked Judith Liebrau of a panel of experts on Thursday afternoon. Had you been there you would never look at a music performance competition again in quite the same light after the presentation by Chia-Jung Tsay of University College London. She managed to show quite convincingly, based on experimental evidence, that judges take very little notice of the sounds musicians make when judging performances but are almost entirely influenced by the visual aspects of the musician's presentation, in particular the amount of passion and emotion they display.

Learning to be an ace drum programmer or turntable DJ was another possibility at the 135th, with tutorials from Justin Paterson and Stephen Webber. Paterson took his students through some of the complexities of both synthetic and human-emulated drum programming, looking into dynamic processing and intricate automation, while Stephen Webber showed how the audio engineer and artist become one in the "Art of the DJ."

TECHNICAL PAPERS IN FOCUS

Papers chairs, Brett Leonard and Tae Hong Park, had brought together a most impressive collection of presentations, includ-

ing engineering briefs, papers, and a number of fully peer-reviewed papers. There were sessions on transducers, signal processing, education, room acoustics, spatial audio, recording and production, applications, amplifiers, and perception, many of them as posters in the concourse outside the main halls.

Esben Skovenborg looked into the level normalization of feature films using loudness versus speech, picking up on the important theme of loudness management during this convention. He had found large differences between methods of normalizing loudness on 35 recent blockbuster movies and showed that normalizing on speech resulted in less headroom than general loudness normalization. There were also automatic methods of identifying speech using a speech classifier, but these sometimes suffered from the difficulty of identifying speech on its own from speech with action sounds, giving rise to somewhat different results to manual speech measurements.

The engineering briefs provided a great opportunity for relaxed presentations of practical issues affecting audio engineers in their work, including some interesting contributions on recording such as "Controlling Drum Bleed with Laser Vibrometry" from two Sennheiser engineers, and "The Urban Mix Engineer" by Paul "Willie Green" Womack, during which the presenter gave a first-hand look at what's involved in mixing hip-hop and other urban music.

Cleo Pike gave a fascinating talk on the way in which we adapt to loudspeakers and listening room acoustics, suggesting that listening tests are not always representative of the way people behave in more natural listening because adaptation to timbral differences takes place over longer periods of time than used in typical tests. If we want listening test results to be representative of what happens outside the lab, we may need to modify them, she suggested.



Cleo Pike spoke on listener adaptation to loudspeakers.

STERLING SPECIAL EVENTS

More densely packed than for many years, the special events program chaired by Jim Anderson filled the hall from morning to night with industry luminaries from recording, production, and engineering sides of the business. Among the highlights, Jimmy Jam gave the lunchtime keynote on Friday, giving the audience the benefit of his views on the current and future direction of the recording process from an artist, engineer, and producer's perspective. A five-time Grammy winner, who had recorded hits for some of the biggest names in the business, including Celine Dion, Mariah Carey, and Michael Jackson, Jam took the theme that technology has to serve art, not vice versa. "Ultimately," he said, "it's my job ... to have those two elements meet and not crash. And that's when you're using the available technology to capture the artist in their purest form."

Ray Dolby, strong supporter of the AES and a household name for noise reduction and cinema sound systems, died recently at the age of 80, and here in New York his long-time colleague, Ioan Allen, offered a retrospective of his life along with some reminiscences on what it was like to work with Ray Dolby over four decades.

We also got to see "Inside Abbey Road 1967" with photos from the Sergeant Pepper recording sessions, chaired by moderator Allan Kozinn. With panelists Henry Grossman and Brian Kehew,



Young Guru



Jimmy Jam



Platinum Producers panel



The Grammy Sound Table remembered Phil Ramone.



Graham Blyth on the organ at the Church of St. Mary the Virgin.

STUNNING SPECIAL EVENTS

the audience got to see pictures and memories of those times, many of the pictures being largely unseen. Kehew, a coauthor of the acclaimed book *Recording the Beatles*, illustrated technical aspects found in Grossman's photos, arousing great interest from the assembled crowd.

Graham Blyth's organ recital blew the audience away at the Church of St. Mary the Virgin on W. 46th St., with his striking renditions of Marchand and Franck. With its "open-plan" pipe layout and no shortage of loudness, the Aeolian Skinner Opus 891 organ at St. Mary's was installed in 1933 and is still going strong. Graham concluded his recital with the impressive "Grand Choeur Dialogué" by Eugene Gigout, a form of duet between two different parts of the organ that has been otherwise played by combinations of brass band and organ or on two organs. This recital celebrated the 20th anniversary of organ concerts at AES conventions, the first of which took place at New York's St. Thomas' Church on 5th Avenue in October 1993.

Ever popular at AES conventions, the Platinum series of events drew huge crowds in New York. On Friday Justin Colletti of SonicScoop in Brooklyn hosted a trio of multifaceted audio gurus on the Platinum Engineers panel. Chris Coady, Patrick Dillet, and Manny Marroquin discussed creative recording and mixing techniques, as well as playing examples of their work to illustrate some of their most successful artist collaborations. The Platinum Producers, Jeff Jones, Dano "Robopop" Omelio, and Dave Tozer, were hosted by David Weiss on Saturday, to discuss how an understanding of music's past, present, and future helps producers in their quest to realize the artist's vision. On Sunday, Bob Ludwig rounded up a star line-up of mastering engineers to consider how the world has changed now that there are so many release formats, including the recent Mastered for iTunes initiative. Greg Calbi, Darcy Proper, Doug Sax, and Tim Young offered their wisdom, sounds, and ideas about what the future might hold.

Staying in the recording business, and as a tribute to the late Phil Ramone, the Grammy Soundtable assembled on Saturday afternoon to ask "What Would Ramone Do?" Looking back over 50 years of artistic and technical innovation they went behind the scenes with colleagues, footage, and friends for an analysis of the wisdom and knowledge behind the great man's achievements. Following hot on this session's heels, the wisdom of Bruce Swedien was offered for all to hear in his session "I Have No Secrets." During this capacity event, Swedien shared his insights into microphone technique and the acoustical environment, presenting an alternative to the plug-in fuelled world that is 21st century music production.

STUDENTS GET BUSY

There's always a lot going on for students at AES conventions, and here in New York the place was humming with activity from start to finish. Under the leadership of Colin Pfund, Student Delegate Assembly chair for North and Latin America, with John Krivit of the AES Education Committee, there was a wide selection of career events and recording competitions, as well as a design competition and exhibition for hardware and software projects, split into undergraduate and graduate classes. Sponsors such as Earthworks, Reaper, and CharterOak offered attractive prizes for the talented winners. Speed mentoring was offered in association with SPARS by a committed group of volunteer professionals from all the main walks of the audio business, and a careers fair provided companies with a chance to spot the best graduates.

TECHNICAL TOURS GET VISITORS ON THE ROAD

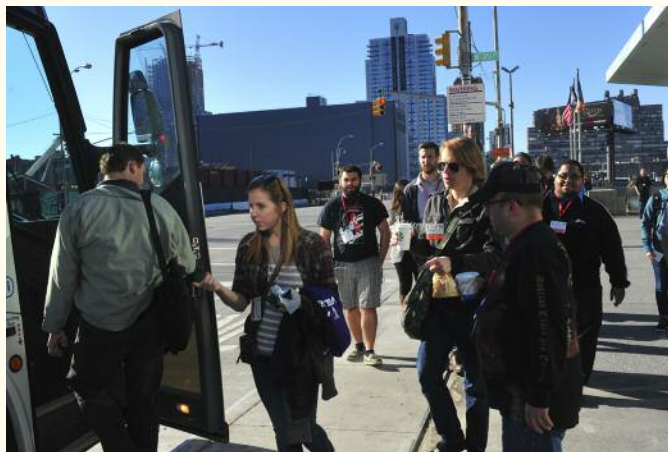
A total of eight technical tours had been put on by David Merrill, including a visit to Definition 6, an award-winning video and audio production facility for marketing applications. Kaufman Astoria Music & Sound was partnered with a trip to the Museum of the Moving Image for tour number two, enabling visitors to appreciate the art, history, and technology of film, television, and digital media. The Broadway show, “Book of Mormon” provided the backdrop to a tour discovering all the aspects of what goes into the audio production and lighting for such an event, while WNYC radio station enabled delegates to drop in on the weekday arts talk show “Soundcheck.” Battery Studios, Sony Music Entertainment’s New York facility, took visitors round their collection of ancient and modern recording equipment, along with the latest in mastering tools. There was also a chance to visit Avery Fisher Hall and the post houses Polarity and Outpost (“Late Night with Jimmy Fallon”).

HISTORICAL PROGRAM

Thanks to the coordinating efforts of Harry Hirsch, the historical program was able to stage a number of sessions at the 135th, one of which has already been mentioned—the tribute to Ray Dolby by Ioan Allen. Surveying the history of jazz big bands, both from a musical and a recording point of view, Robert Auld fascinated visitors for ninety minutes with insights into a recent recording of a big band using techniques that had been developed in the golden age of stereo during the 1950s. Alan Silverman of Arf! Mastering gave a presentation on the restoration of Peggy Lee’s 1959 album “Jump for Joy,” questioning why the stereo mixes had never been released on CD and recounting a recent project to do high-resolution transfers of these original mixes.

Tom Fine traced the history of recording albums on 35mm magnetic film in the 1950s and ‘60s, a trend that began because of the medium’s advantages over other tape formulations, such as lower noise, less wow and flutter, and

higher saturation levels. This eventually died out because tape improved and it became prohibitively expensive to work with 35mm film. Finally, Nadia Wallaszkovits discussed the restoration, transfer and digitization of the Armando Leça folk music collection, made in 1939–40 in rural Portugal.



All aboard the bus to one of the many technical tours at the 135th.



Students discuss audio job opportunities with prospective employers at the Career Fair.



From left, John Krivit, Simon Wystrach, Marija Kovacina, Andrea Pepper, Colin Pfund, and Kyle Snyder at SDA event.

TECHNICAL COUNCIL AND STANDARDS MEETINGS

Coordinated by Mark Yonge, standards manager, and Bruce Olson, Standards Committee Chair, there was a full program of standards meetings, covering the many diverse areas of audio engineering. Two new projects, AES-X224 on metadata integrity in audio files and AES-X222 on a new audio data connector, were initiated, and the AES67 standard on audio-over-IP interoperability was launched to great acclaim. The metadata project will create a guide for manufacturers of audio hardware, software, and computer platforms describing best practices for the management of metadata embedded in audio files.

Francis Rumsey and his colleagues on the Technical Council led a comprehensive program of Technical Committee meetings covering the many fields of endeavor that make up audio engineering. These committees stimulate and promote the technical policies of the Society and plan convention and conference activities to educate and inform the membership. They can also propose standards work and publish technical documents.

NOT TO FORGET...

Good technical facilities and assistance are crucial to the success of a convention, and the sterling efforts of Michael McCoy, facilities chair, together with his assistants, David Forsee and Giovanni Lobato, were appreciated by all those taking part. A team of volunteers organized by Rebecca Yuri Feyn-

berg and Adrian Tregonning was also on hand to ensure the smooth running of this complex event, and their efforts are to be commended.



The AES-67 standards group celebrates the recent success of the launch of the network interoperability standard.



The AES Board of Governors and committee chairs meet after the convention.

AES COMMITTEES

In the background, and unseen by the majority of delegates to a convention, much of the business of the Society takes place in committee rooms where future conferences, publications, and strategy of the organization are planned. The Annual Business Meeting at the outset of the convention confirmed that AES membership is remaining high. During the Regions and Sections meeting representatives of AES sec-

tions from around the world met with the Society's vice presidents to share examples of stimulating local events and membership initiatives. The Publications Policy Committee reviewed the introduction of a new online reviewing system for the *Journal* and the implications of Open Access for the Society. The Board of Governors met on the evening of the last day of the convention, during which the society's future policy and direction was debated.