

CONVENTION REPORT

AUDIO AES 141ST AUDIO ENGINEERING INTERNATIONAL CON

The 141st Audio Engineering Society Convention, which took place over four days from the end of September to early October at the Los Angeles Convention Center, was the place to be if you wanted to listen, learn, and connect with the movers and shakers of the audio industry. The exhibition floor, panels, and technical sessions were crowded throughout the show with over 250 brands represented in the exhibits hall and over 13,000 registered attendees. The convention received praise from attendees, exhibitors, sponsors, and collaborative organizations alike. With over 200 presentations from over 650 leading researchers and practitioners in the field, AES Los Angeles provided an unprecedented convention experience.

This way to:



AES president John Krivit greets Stevie Wonder on the exhibition floor.

**Los Angeles
Convention Center
Los Angeles, USA**

**September 29–
October 2, 2016**



SOCIETY VENTION

Proving once again that “If it’s about audio, it’s at AES,” convention committee cochairs Valerie Tyler and Michael MacDonald and their team created a comprehensive schedule of workshops, panels, and special events. “The Los Angeles Convention Center’s West Hall was a great new location for AES 141; the layout is much more convenient,” said MacDonald. “The convention committee and the AES staff did a great job with the program and facilities. We also co-located the AVAR conference, and that brought cutting-edge 3D audio for gaming and virtual reality into the mainstream of the AES. Overall it was a fantastic success with solid attendance and record program participation.”

“I was really impressed by the amazing program our convention committee assembled this year—featuring industry legends and leading innovators, and setting a record for paid registrations,” stated Bob Moses, executive director of the AES. “I’m also proud to see AES67 take off and watch the companies who have been leading the charge in our standards committee become the market leaders in the exhibition now. VR seems to be the next big thing, and the top developers were right there at our event, mapping out the future.”

The convention received support from leading audio companies including platinum sponsor Sennheiser; special events sponsor the Recording Academy P&E Wing; mobile app sponsor THAT Corp; broadcast and streaming track sponsor Dolby; game audio track sponsors Oculus and GAUDIO Labs; Project Studio Expo sponsors Antelope Audio, Focusrite, Genelec, Sennheiser, Universal Audio, and Waves; and Live Sound Expo sponsors Avid, Cadac, DPA, KV² Audio, L-Acoustics, Lectrosonics, QSC, Sennheiser, Waves, and Yamaha.



Crowds through the exhibition hall entrance on the first day

OPENING CEREMONY AND AWARDS

Opening the convention to an overflow crowd in the special events hall, executive director Bob Moses welcomed everyone to LA for the second time in recent years. Two years ago, he said, all kinds of records had been broken, thanks to all those involved. Praising the volunteer effort involved in bringing such a convention into being, he noted the inspirational leadership of Michael MacDonald, who brought a sharp business sense to the table, and Valerie Tyler who had been tireless in ensuring that everyone involved did what they should. Moses encouraged everyone to join the AES, remarking that it was now more valuable than ever, with a free subscription to the E-Library now included. The new "Refer a Friend" option enables members to get a refund for themselves.

President John Krivit recalled a letter written to the *AES Journal* in 2014 by 97-year-old Norman Pickering, the youngest member of a group of ten involved with the founding of the Society back in 1948. Pickering died just over a year ago, having seen the organization flourish and turn into something bigger than he had ever imagined possible. The reason for and purpose of the AES remains the same as it did then, Krivit suggested, essentially being a forum for the exchange of new discovery and best practices. He encouraged delegates to take advantage of the many educational opportunities available, to learn, connect, and be creative, to find inspiration and to have fun.

Welcoming delegates on behalf of the convention committee, Michael MacDonald thanked Valerie Tyler in particular. "I do all the talking, she does all the work!" he quipped, thanking the entire committee for a great job, and the exhibitors for their commitment to the show. MacDonald commented that what were a lot of independent silos of knowledge needed to come together because of the requirements of audio for virtual and augmented reality (AVAR). This needs a consistent way to author the audio so that it doesn't have to be redone for every different distribution format. AES is going to become more relevant and important because of that. He also noted a particularly interesting Product Development Day in the program, the result of Scott Leslie's idea to run a workshop that tried to build an audio product in a day.

Mentioning the parallel AVAR conference (report published in the November issue), cochair Andres Mayo noted that the event had sold out, with 430 people registered, and over three times the sponsorship expected. He thanked his cochair Linda Gedemer and the other members of the committee.

Honoring the awards recipients at the



Bob Moses



John Krivit



Michael MacDonald



Andres Mayo



Sean Olive

AES AWARDS AT THE 141ST

GOLD MEDAL

DIANA DEUTSCH in recognition of your lifelong contributions to the understanding of the human hearing mechanism and the science of psychoacoustics

D. B. "DON" KEELE, JR. for outstanding and significant research, design and product development, over a period of more than 45 years, of loudspeakers and loudspeaker systems providing broadband constant-coverage performance

SILVER MEDAL

DON PULUSE in recognition of your lifetime achievement of engineering quality audio recordings

CITATION AWARD

JUAN SAN MARTIN and **NATALIA SOTELO** in recognition of your outstanding contributions to the dissemination of professional audio in Latin America over a sustained period of time

BOARD OF GOVERNORS AWARD

JIM ANDERSON in recognition for co-chairing the 139th AES Convention in New York City

DAVID BIALIK in recognition of your three decades of service to the society promoting education and best practices in the field of broadcast audio and specifically for your efforts in creating the Empire State Building events during the 139th AES Convention

PAUL GALLO in recognition for co-chairing the 139th AES Convention in New York City

PATRICK HEGARTY in recognition for co-chairing the 2016 AES International Conference on Headphone Technology, Aalborg, Denmark

MICHAEL KELLY in recognition for co-chairing the AES 61st International Conference on Audio for Games, London, UK

ANDRES FELIPE MILLAN in recognition for co-chairing the Conferencia Latinoamericana AES 2016, Bogotá, Colombia

FABIO NICHOLLS in recognition for co-chairing the Conferencia Latinoamericana AES 2016, Bogotá, Colombia; Andres Millan will accept the award on Mr. Nicholls' behalf

SEAN OLIVE in recognition for co-chairing the 2016 AES International Conference on Headphone Technology, Aalborg, Denmark,

NEIL SHAW in recognition of your outstanding contributions to the organization of the 57th AES Conference in Los Angeles, CA, USA

VALERIE TYLER in recognition of your chairing the 137th AES Convention in Los Angeles, CA

FELLOWSHIP AWARD

MAURICIO ARDILA for outstanding contributions to the field of audio education and the dissemination of the understanding and application of audio technology developments and innovations particularly in Latin America

DAVID JOSEPHSON in recognition of your significant contributions to the science of microphone design, to AES Standards initiatives, and for conspicuous service to the AES Board of Governors and management staff

BOB KATZ in recognition of your outstanding contributions to the advancement of professional audio worldwide over a sustained number of years

141st Convention, Sean Olive, chair of the Awards Committee, was proud to introduce a very wide range of individuals who received awards ranging from Citations and Board of Governors Awards, through Fellowships, to Gold and Silver Medals. A complete summary is given in the sidebar above.

Silver Medal recipient Don Puluse had attended his first convention



John Krivit presents the Gold Medal Award to Diana Deutsch and Don Keele.



Don Puluse received the Silver Medal Award.



Citations were presented to Juan Eugenio San Martin and Natalia Sotelo (not present).



Board of Governors Awards were presented to, from left, Jim Anderson, David Bialik, Paul Gallo, and Patrick Hegarty.



Board of Governors Awards were presented to, from left, Michael Kelly, Andres Millan, Sean Olive, and Neil Shaw.



Board of Governors Award was presented to Valerie Tyler.



Fellowship Awards were presented to, from left, David Josephson, Mauricio Ardila, and Bob Katz



Rob Selfridge (best student paper award), with John Krivit and Rob Maher.



William Perkle and Akhil Singh (best peer-reviewed paper award), with John Krivit and Bozena Kostek.

141ST CONVENTION AWARDS PRESENTATION

in 1959. Acknowledging his award he thanked all the artists he had recorded and the people who had made it possible for him to be there. To all the committee and donors of the Education Foundation (of which he is chair) he offered his profound thanks.

Accepting her Gold Medal, psychoacoustician Diana Deutsch noted

that the AES is unique in enabling interactions between many disciplines. She thanked the Society for the award, which she would treasure. Another Gold Medal awardee, Don Keele, professed himself humbled by the award. At 76 years old, he said, he was more dressed up today than he had been for years. He loved to write papers, he



An attentive crowd listens to Ron Jones' keynote.



Ron Jones discussed the communicative power of music.

said, so he had written over 50 and "got credit for stuff other people had started."

KEYNOTE

Ron Jones is a professional composer with over 40,000 compositions to his credit and growing. He has scored for film, television, games, and live performance, and his credits include "Star Trek," "Family Guy," and many more. With a Grammy nomination and five Emmy nominations, Jones was well qualified to speak as keynote during the opening ceremonies.

"It's a joy to be back in LA," said Jones, a city that is really "a series of taco stands with freeways connecting them." Hollywood started in LA, he said, but now it's everywhere, it being essentially about vision and creativity. Those things can be taken and inserted into all kinds of new technology that we are dealing with today. In his music, he said, he has to reach the human receptor quickly—there are so many channels of content that you have to communicate effectively. Despite all the latest technology it still comes down to this. As the composer for media you are a bit like the court jester, he proposed. You're in there with the king and his courtiers but you don't have the power to do anything except entertain them. We need to create jobs for the coming generation, he said, and to find ways to teach students what communicates. This will still matter 50 or 100 years from now.

EXHIBITION

As mentioned at the start, over 250 brands were represented at the 141st Convention, creating an exhibition floor filled with throngs of people trying to find out about the latest gear.

The convention "was a runaway success," proclaimed Phil Wagner, president of exhibitor Focusrite Novation Inc. "We were busy non-stop the entire time with high-quality clientele. It will be memorable as one of the busiest shows ever." That sentiment was shared by fellow exhibitor Joe



Visitors swarmed the exhibition hall at the LA Convention Center.



One of the many product demonstrations taking place during the show.

Bull, managing director of JoeCo, who stated that this had been his company's best West Coast AES convention in years. "We were very impressed by the volume and the quantity of the traffic at AES L.A." "Here at AES, we get to spend more time with customers, and for us, it's a quality-over-quantity experience," said James Capparelle, marketing manager, USA, for DPA Microphones. "The crowd that AES attracts means that we get a lot of engineers, and this is their passion. Everyone is here because they want to be; it's not a retailer audience like at other shows; this one is for our crowd. It's the engineers who are using our microphones, and that's who we like to market our products to: professional users." Will Eggleston, Genelec's marketing director, noted, "this year's AES convention was a great success. It was obvious to those of us at the Genelec booth and demo room that this group of attendees was knowledgeable, qualified, and experienced. Whether working pros or aspiring students, these were the individuals—serious about audio—whom we try to reach throughout the year."

Demonstrating that the large-format mixing console is still a going concern, API introduced the Legacy AXS, a mixer with up to 80 channels and an entirely analog signal path. The return to 1.5-inch modules allows API 500 equalizers to be used on every channel, and there are six automated stereo echo returns in the center section, along with 5.1 monitoring. Alternatively, in a new concept for mixing, A-Designs was showing its Audio Mix Factory, a rack mounted "out of the box" summing mixer for workstation-based production, enabling up to 16 channels to be mixed to stereo outputs. A transformerless or transformer-based signal path can be selected depending on the user's preference.

On the loudspeaker front, Genelec, with its own listening room

at the convention, was spotlighting the 8351 Smart Active Monitor, for nearfield applications. It's a very compact unit with three-way operation, housing a coaxial mid/high-frequency driver with well controlled off-axis directivity. The woofer is not visible from the front, being concealed beneath the unit. Ocean Way Audio also unveiled a new studio monitor, the HiRes 3.5 Studio Reference Monitor, which is a free-standing or soffit-mounted version of the HR4 launched at the 139th Convention. Containing a two-way horn for HF and MF ranges, and two 12-inch bass drivers, the speaker employs tri-amped drive totaling 3,400 watts. The result is said to be a very wide directivity pattern, both vertically and horizontally. Looking to PA applications, Bose Professional was showing its new ShowMatch DeltaQ modular array loudspeakers. These are said to enable changes in directivity for each module, facilitating careful matching of the array coverage to the audience area.

Lots of new plug-ins were also being promoted, including the latest Abbey Road Vinyl plug-in from Waves, which is said to add the sound of vinyl production and playback to any recording. It allows the user to virtually move the tone arm of the reproducing turntable to different places on a record, and also to add vinyl noise, as well as wow and flutter. Waves also showed its Nx Virtual Mix Room, a plug-in that puts the headphone-wearing engineer into a realistic loudspeaker monitoring space with natural reflections. The system uses the computer's camera to do real-time head tracking. In further innovations, iZotope introduced Neutron, an intelligent mixing plug-in that seems to do a lot of the work, such as suggesting EQ settings and optimal configurations for other processing. It also allows the user to see masking "clashes" between elements of a mix, enabling one to see how to clarify and improve a recording.

PROJECT STUDIO EXPO AND LIVE SOUND EXPO

The Project Studio Expo (PSE), in association with *Sound on Sound*, has become a popular feature of recent conventions. Offered free to all registrants, and based on the show floor, the PSE brought the latest techniques, tools, and experts together for professional training on

topics ranging from acoustics in small spaces to microphone placement, mixing, and mastering. These included sessions from Paul White such as "What Really Makes a Difference?



The Project Studio Expo in full swing

Getting Great Results from a Budget Studio" and "How to Make Your Recorded Vocals at Least Twice as Good" from Craig Anderton. This partnered well with the Recording and Production track in the main technical program, for those with an All Access pass.

In similar vein, the Live Sound Expo (LSE) at the 141st Convention offered expert advice for the broad spectrum of live sound engineers (some 25% of convention attendees) with an emphasis on the practical, bringing professionals with decades of experience to the stage to inspire and educate attendees. This included sessions on AES67 networking from those closely involved with its implementation, Live Mixing Academy sessions, and matters relating to wireless microphones. The Sound Reinforcement track in the main technical program complemented the free LSE with more advanced sessions on topics such as mixing for immersive live events and systems for challenging acoustic spaces.

MAKING TRACKS

Themed tracks at conventions have proved to be a good way of guiding people through the array of events offered in the program, under the coordination of a track chair who has tried to bring

together a series of sessions related to that theme. Here in LA were themes on Broadcast and Media Streaming (David Bialik), Game Audio (Steve Martz and Michael Kelly), Networked Audio (Bob Lee), Product Development (Scott Leslie), Recording and Production (Jim Kaiser and Michael Romanowski), Sound for Picture (Brian McCarty), and Sound Reinforcement (Paul Chavez and Jonathan Laney).

Part of the Product Development track was Super Saturday, dedicating the day to a workshop where product development professionals learned about the latest technologies and best practices in bringing new products to market across the entire development process. The day-long session was presented by a team of product development experts, each one discussing best practices and technologies in their specific disciplines of product management, user experience, industrial design, acoustic design, natural voice processing, validation and testing, and sourcing and supply. Unlike other AES sessions, this was a day-long session where the presenters worked as a team with the audience to develop a product codenamed Speak2Me. The proposed product was to be one that competed with Sonos, Alexa, and other high-volume consumer AoT (Audio of Things) products. It was like taking a lecture and a lab class at the same time.



Live sound explained during a free seminar.



David Bialik (center), chair of the Broadcast and Streaming track, with Greg Oganowski (left) and Robert Orban (right)

HEYSER LECTURE

MIDI, the Musical Instrument Digital Interface, has profoundly affected the way in which music is made and devices controlled over the past 30 or so years. Dave Smith, presenter of this convention's Heyser Memorial Lecture, has been affectionately called "The Father of MIDI," having been a driving force behind getting the specification for remote control of instruments accepted in the first place. His lecture, "Synthesizers: From Analog to Digital to Software to Analog" charted the 50-year history of the synthesizer from the "large modular beasts" of the 1960s, covered with cables, through the portable and increasingly digital devices of the 70s and 80s, into the software implementations of later years. Now analog synths are being sought again and new ones are being made; modular synths are back and very popular. Things have to some extent come full circle, although we are not back to exactly the same place we started.

WORKSHOPS AND TUTORIALS FOR ALL

Among the many workshops and tutorials organized by Mike Wells and Greg Riggs was one to kick off the first day, given by Martha de Francisco on "The Art, Study, and Practices of Listening." During the 90-minute tutorial Francisco described an interdisciplinary seminar series at McGill University that explored how learned auditory skills and fine discrimination constitute an essential requirement for the practice of various professions. While critical listening of music was the guiding motif, invited speakers led the class in their exploration of "listening" as a main component in a variety of areas of human life, while recognizing connections. Understanding the basic concepts of listening tests was the main theme of Jan Berg's tutorial on the following day, during which he aimed to start from scratch by explaining the

basic concepts used in experimental design in order to enable audio professionals to appreciate the possibilities of listening tests.

Back on the stage too was the ever-popular David Griesinger, giving a new tutorial on the physics of auditory proximity and its effects on intelligibility and recall. His tutorial detailed and demonstrated the many ways ears and speech have evolved to utilize the phase relationships of vocal harmonics to separate sonic information from complex and noisy environments. Early reflections randomize these phases, he said, and in most rooms at some distance the ability to detect them is lost. Speech becomes difficult to localize, intelligibility decreases, and information is difficult to recall. Participants had the chance to hear these effects for themselves in the conference room.

TECHNICAL PAPERS AND ENGINEERING BRIEFS

AES Conventions act to bring together research and development staff from all over the world to share the latest work in audio engineering. Here in LA, under the stewardship of cochairs Brett Leonard and Rob Maher, there were 26 sessions of lectures and posters on topics including transducers and perception in particular. Perception topics included interesting themes of image shift in immersive audio, and the development of a model for predicting how distracting interfering sounds from a "dark" sound zone might be when listening in a "bright" sound zone. There was also an interesting paper on distortion audibility in vehicle audio systems, and another on the effect of presentation method on the outcomes of listening tests.

Engineering briefs are subject to more relaxed reviewing criteria than research papers and offer an opportunity for people to

present work of perhaps a more practical or engineering development nature. At the 141st these included a range of interesting subjects



Heyser lecturer Dave Smith (left) receives a certificate of recognition from the officers of the Technical Council, Michael Kelly, Bob Schulein and Francis Rumsey.



Authors presenting papers in poster sessions included desk-top demos.



Gold Medal winner Don Keele explains a point during his paper.



Members of the 141st committee: from left, Jim Kaiser, Bob Lee, Paul Chavez, Scott Leslie, Jonathan Laney, Garry Margolis, Michael MacDonald, Steve Martz, Valerie Tyler, Greg Riggs, Luke Huapaya, Bob Moses, Richard Wollrich, Rob Maher, Frank Wells, Andres Mayo



Kyle Snyder



Magdalena Plewa



Mark Gander



David Scheirman



Scott Esterson



Steve Martz and Michael Kelly



Evan Peebles and Stephen O'Hara

AES THANKS THE 141ST CONVENTION COMMITTEE



The noble army of volunteers gathers outside the SDA booth.

such as whether we prefer live or edited studio recordings, how distortion can affect hip-hop mixes, and new paradigms for mixing interfaces. Kenneth Faller and his colleagues presented a fascinating brief on a real-time simulation environment for studying aircraft community noise.

SPECIAL EVENTS

Thanks to the sterling efforts of committee member, Scott Esterson, a dazzling line-up of special events was offered to attendees, open to all registered for the convention. Industry media mainstay Mr. Bonzai and his special guests, Jack and Blake Douglas kicked off the AES special events calendar with a first-morning wake-up discussion, talking about music, motivation, industry trends, and prognostications. Later the same day, the popular Latin Producers Panel was chaired by Andres Mayo, bringing together top-notch music producers and engineers from the Latin scene. Multiple Grammy-winning pros presented an in-depth look at their latest recordings and had an extended question session with the audience.

Extending the VR theme from the adjacent conference into the convention, Gregory Gordon of Pyramind chaired a panel of experts to discuss “Implementation and Mixing for VR Games as Both Art and Science.” Realism, it was said, is not always the end goal, as sonic aesthetics have to match the game play in order for the experience to feel cohesive. Topics of discussion ranged from implementation of ambisonic and binaural spatialized audio to nonspatialized audio placement, appropriate soundscapes and ambiences, room and environmental effects, suitable volume levels for long term listening, diegetic use of music, and effects such as occlusion through filtering, equalization, and distortion.

On Thursday evening, during another of his ever-popular organ concerts, Graham Blyth played two organs in the First Congregational Church of Los Angeles. The Gallery Organ by Hermann Schlicker was ideal for performing baroque works including Bach and Buxtehude,

while the larger Chancel Organ by Ernest Skinner and others proved to be a dramatic alternative for playing French romantic material such as Boëllmann’s *Suite Gothique*.

The Grammy Sound Table at this year’s convention was chaired by Glenn Lorbecki and featured a number of the most experienced broad-

cast audio pros in the business to discuss audio production for live global telecasts. Going live with tens of millions of viewers hanging on every note and play, there are no second chances to get it right. Panel members pulled back the curtain on the most technically advanced and logistically challenging audio productions on the planet.

Platinum sessions featured one on vocal production chaired by Terri Winston of Women’s Audio Mission, looking at compression techniques, de-essing, vocal editing, comps, and more. Michael Romanowski chaired the Platinum Engineering panel, during which renowned engineers discussed key elements of the creative and technical process. Platinum Mastering followed on, looking at the later stages of the production process, leading up to release, chaired by Tom Kenny of *Mix Magazine*.

During a session by Jack Joseph Puig provocatively titled “Hi Res Audio and Soccer Moms—How Are They Related and How Will People Be Getting Their Music in the Future?” the presenter asked whether hi-res audio matters and whether the majority of people can hear the difference. This formed a basis for discussing the potential for disconnects between record companies, manufacturers, and consumers, and questions about where music delivery is going and what will draw in fans in the future.

The challenges of preserving our audio heritage were comprehensively aired in the session “Restoration Audio: Music Today and Tomorrow,” moderated by Bob Koszela of Iron Mountain Entertainment Services. The panel addressed the challenges to restore degraded or damaged media assets including those affected by conditions such as binder hydrolysis (sticky shed), tape binding adhesion, mold, and water damage. Advancements in



Platinum Mastering panel with moderator, Tom Kenny, right.



The Grammy Sound Table panel from the P&E Wing.



Jack Joseph Puig (left) and David Asaroti during the special event Hi Res Audio and Soccer Mums.



Big band composer and arranger, Sammy Nestico, center, with Don Puluse, left, and Jim Anderson at the 141st special event “Sammy Nestico, The Soldier Sessions with the US Army Jazz Ambassadors – in Surround.”



A busy Education and Career Fair engages students and colleges



Kyle Snyder, center, with student competition winners



An enthusiastic cohort of students and staff from Tribeca Flashpoint College ready to great 141st visitors.

audio technology and tremendous changes in how the entertainment industry creates and monetizes content, it was said, have challenged engineers to accommodate requests to migrate, mix, master, store, and distribute that content securely.

HISTORY IN CONTEXT

The Historical Committee had put together an interesting collection of presentations, under the guidance of Mark Gander, including one on the history of studio acoustic design given by George Augspurger. Augspurger has designed hundreds of studios and other rooms, as well as custom monitor speakers, and he looked at how practices had evolved over a 65-year timeline.

Alex Case, now president of the Society, looked into historic microphone technologies and their connection with vocal performance

techniques, and incoming president elect David Scheirman explained control systems for large-scale loudspeaker arrays both past and present. Alex Voishvillo concluded the historical events with a tour of the evolution of horns and waveguides.

STUDENT EVENTS

Among the numerous lively student events at the convention, organized by Kyle Snyder with Zach Bloomstein and Magdalena Plewa, a career event on the first day entitled “Real Industry and AES: Live!” featured a mentor-led workshop given by music, video, and Silicon Valley professionals for top students and early career professionals. Real Industry also sponsored a student party that was held at The Charleston House on Thursday evening. Not content with one party, Telefunken had also sponsored an event on the Friday evening at Bedrock LA featuring live in-studio performances by Ivory Deville and Matt Szlachetka.

In among the regular competition and critique sessions for student recordings and designs was an interesting workshop led by Ian Corbett called “This is a Mix! This is a Master!” during which the differences between the two stages of production were explained with examples. Too many people try to create a mastered sound in their mixes, but that can create problems for the mastering engineer further down the chain and limits what they can do. Mastering engineers explained some of the common problems they find, with examples from material sent to them.

TECHNICAL TOURS TAKE IN LA AUDIO SCENE

Courtesy of Jessica Livingston’s careful planning, ably assisted by Mark Halvorsen, a total of ten technical tours were planned, taking in highlights of LA’s recording scene for those lucky enough to secure a ticket. Some notable visits included one to Sony Computer Entertainment America, taking in state-of-the-art audio facilities located within Santa Monica Studios, the game studio behind the “God of War” franchise. This walk-through tour of the facilities included an explanation of tools, process and pipeline, and samples of the studio’s audio work in recent releases.

There was also a tour of Paramount Recording Studio, a legendary eight-room complex with state of the art facilities. Paramount is a favorite destination for many audio engineers, with a mastering room, four preproduction suites, two mixing/overdub studios, and their renowned Studio C; a classic 1970s era Tom Hidley-designed control room with a large tracking room consisting of multiple rock, parquet wood, and glass surfaces and 20-foot ceilings.

A visit to Dolby’s Umlang Theatre in Burbank offered a first-hand look at Dolby’s RMU (Rendering and Mastering Unit) tools for immersive audio in cinema, and showed how they integrate into consoles and third-party tools. Experienced engineers demonstrated a live Atmos theatrical mix enabling attendees to see and hear the process in a Dolby-aligned theater. The mix demonstration was followed by a selection of recent feature film clips mixed and released in Dolby Atmos.

AES COMMITTEES

The AES Technical Council has been described as the “CTO of the AES.” Comprised of expert committees overseeing audio disciplines such as Spatial Audio, Audio for Games, and Broadcast and Online Delivery, the “TCs” bring the world’s top experts together to chart a course for the future in each area. Many conven-

tion events (workshops, tutorials, etc.) and conferences are organized by TCs to stimulate activity and to educate the industry. During the course of the convention nearly all of the TCs met and a number of new conferences are in the planning stages, including one on audio forensics, another on semantic audio, and an open-air sound reinforcement event during 2017.

Conventions also present an ideal opportunity for AES Board members to meet in the various committees that ensure the ongoing operation of the Society. During the Regions and Sections Forum representatives of AES sections from around the world met with the Society's vice presidents to share examples of stimulating local events and membership initiatives. Meetings of all the other standing committees such as Publications Policy and Conference Policy also met during the event. 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 agreed.

BEHIND THE SCENES

Conventions such as this one would not be possible at all without the diligence and hard work of the people that make sure everything works smoothly. Facilities chair David Scheirman and vice chair Luke Huapaya did a spectacular job of pulling all this together. Stephen O'Hara and Evan Peebles coordinated a team of volunteers that worked exceptionally hard to make sure everything was in order for the participants. The headquarters staff had gone beyond the call of duty to ensure that all the back-office work needed to facilitate a successful convention was done in time and to a high standard, and treasurer Richard Wollrich kept a close eye on the budget. Garry Margolis and Lia Enkells acted as transportation advisers, helping people to find the best ways of negotiating the LA transport system.

All in all the 141st Convention proved to be a rewarding and successful event that lived up to high expectations in every way. Next year's U.S. convention will be co-located with NAB Show New

York, in order to take advantage of the many synergies that exist between audio and video, and to increase the opportunities available to attendees.



Peter Cook, retiring as chair of Regions and Sections after many years of diligent service, chairs his last Regions and Sections Forum.



Jan Abildgaard Pedersen, center, chairs a meeting to determine AES conference policy over the next few years.



The new chair of the Publications Policy Committee, Josh Reiss, chairs his first meeting.



Francis Rumsey, center, chairs the Technical Council meeting, together with Michael Kelly (left) and Bob Schulein.



The AES Board of Governors, committee chairs and officers, gather for a photograph prior to the board meeting at the end of the convention

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