2016 ILDA AWARDS
Cover photo: “Vortex” by Dan Goldsmith
(vertical crop from horizontal photo)
First Place winner, Laser Photography category
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ILDA requires its Members to perform safe and legal laser shows. **All Members submitting ILDA Award entry videos have explicitly certified that the laser effects depicted meet safety standards, as well as all applicable laser safety laws and regulations** (including laws for audience scanning) in the location where the show was performed.

- Entries filmed in a studio, with no audience, can use any power and can scan anywhere, even if the original show was intended for an audience.
- However, if the video depicts an audience watching the laser show, or has lasers near performers, then the show must be safe for the audience and performers, and must comply with all applicable laws and regulations.

**ILDA Awards safety review**

In addition to Award entrant statements, ILDA reviews every entry for any potential safety issues. **ILDA has the right to remove or disqualify an entry if, in our opinion, the show violates or appears to violate safety standards, laws and/or regulations.**

Note that despite ILDA’s review process, ILDA cannot absolutely certify that an Awards entry is safe and legal. This is ultimately the responsibility of the entrant.

If you have a laser or a laser projector, do NOT attempt to perform the type of audience-scanning effects seen in ILDA Award-winning videos 1) without qualified expert safety planning and supervision and 2) without prior written permission from appropriate authorities. These authorities may include federal, state and local laser safety regulators, venue operators, and insurance companies.
Artistic Awards
Judged May 16, 2016 at the Executive Banquet and Conference Center in Newark, Delaware. Site courtesy Brad Billet who also served as judging coordinator. Judges were: Mark Edgar, Hank Eskin, and Dan Goldsmith.

Laser Photography
Judged by ILDA Members voting online, May 29 - June 13, 2016

Laser Jockey
Judged by attendees watching the LJ performances live during the Lase-Off at the ILDA Conference in Baltimore Nov. 7, 2016

ILDA New Talent search
Judged online by an international jury consisting of: Abdulwahab Baghdadi, Adam Burns, Theo Dari, Tom Harman, Alex Hennig (judging coordinator), Marco Hoyer, Dr. Pavol Kubošek, Dr. Ian Powell, Dr. Alexander Timofeyev, and Tim Walsh. They reached their decision on September 28, 2016.

Fenning Technical Awards
Technical entries were judged via online discussion of a three-member panel that reached its decision on June 14, 2016. Judges were: Walt Meador, Rob Mudryk and Kelly Sticksel.

Career Achievement Award
Selected by ILDA Members voting online August 5-19, 2016
BEAMS/ATMOSPHERICS SHOW FOR A SINGLE X–Y SCANNER PAIR

A single-projector show where the laser is seen in mid-air (not on a screen). Must be primarily beams and/or atmospheric effects.

Empire State Of Mind
LaserAnimation SOLLINGER

Lasershow design: Stephan Rieck
Producer: Frank Henning

This show was created at the request of a client for his 50th birthday. He requested a show to go with the ballad "Empire State Of Mind" by Alicia Keys. The color composition of the beams was to be as quiet as the song. Clear, not too colorful and playful.
BEAMS/ATMOSPHERICS SHOW FOR A SINGLE X–Y SCANNER PAIR

Second Place

Unstoppable
Theo Petrides

Programmer, producer, laser operator: Theo Petrides

This piece represents the artistic side of those who continuously put effort in reaching their goals even when there is a small gleam of light at the end of the tunnel.
BEAMS/ATMOSPHERICS SHOW FOR A SINGLE X–Y SCANNER PAIR

First Place

Future City
LOBO

Beams: Philipp Wendt
Creative director: Alex Hennig
Music: F.O.O.L, "Bounty Hunter"

An almost insane level of precision has become the signature feature of Philipp’s shows.

You will not find a single cue of the music which has not been transformed into laser light. In combination with the extreme accuracy exceeding the frame rate of this video, you have the impression that lasers are not interpreting, but are actually playing the music.
BEAMS/ATMOSPHERICS SHOW FOR MULTIPLE-SCANNER PROJECTORS

A multiple-projector show where the laser is seen in mid-air (not on a screen). Must be primarily beams and/or atmospheric effects. Can also use non-scanner devices such as bounce mirrors, gratings, actuators and mirrors.

Third Place

Happy Beams
Dream Laser

Laser: Anna Dmitrieva

The show is made for six lasers, for three scanners.
BEAMS/ATMOSPHERICS SHOW FOR MULTIPLE-SCANNER PROJECTORS

Second Place

Explosive
VisuTek e.U.

Programmer: Markus Voggenberger
Setup and laser operator: Helmut Gruber

According to David Garrett's new Crossover album, we created a really "explosive" beamshow with precisely timed effects and tried for us a new arrangement with our lasersystems.
BEAMS/ATMOSPHERICS SHOW FOR MULTIPLE-SCANNER PROJECTORS

First Place

**Toccata**
VisuTek e.U.

*Programmer: Markus Voggenberger*
*Setup and laser operator: Helmut Gruber*

The focus of this show lies on the configuration of our laser systems, to create some fantastic effects. For this special arrangement we chose the edited version from Overwerk, a Canadian DJ and producer, who created a powerful remix of the famous *Toccata and Fugue* from J.S. Bach.
GRAPHICS SHOW

Graphic images projected onto screens. Must be primarily representational graphics such as drawn animation frames and computer graphics.

Third Place

**BMW 7er**
Lightline Lasertechnik

*Music: Apocalypse Tomorrow soundtrack*

For BMW the new 7series was introduced with this graphic show. No fog was allowed.
Second Place

Fire
Maxim Ishchik

Programmer and operator: Maxim Ishchik
Laserist and photography: Vladimir Bauman

Pre-game show before game of teams on five-a-side (mini football). The show used a military theme, because the game took place on the day of the armed forces of the Russian Federation.
GRAPHICS SHOW

First Place

New Campus for Students of MIEM
Orion-Art Multimedia

Art director: Alexey Panin
Graphics: Kirill Nikitochkin
Music: Rocky IV original soundtrack

This show is dedicated to the opening of the Moscow Institute of Electronics (MIEM) building. The new complex includes classrooms, laboratories, sports halls and places for students recreation.
Abstracts and other non-representational images projected onto a screen. Must be primarily abstracts. Only a few brief, occasional beams or graphics are permitted.

Uptown Funk
Christopher Short

Programming: Christopher Short
Music: Mark Ronson / Bruno Mars, “Uptown Funk”

A little bit of funk and a little bit of brass. How could I resist? Jangly light to go with the guitar and everything is tight. Lissajous fire and motion. Lots of intensity modulation and 3-dimensional layer masking. Experimental symmetries and world rotations. I wanted something fun and bright that stuck in your eyes like a good hook camps out in your brain. This is an excerpt from a longer show.
I’ve held off doing anything by Pink Floyd for so long. I like Floyd, but it’s been done and redone so many times. Oh well, I thought. I had a long trip with an uncountable number of hours to kill.

I wanted to keep an old school analogue knob box feel. Traditional lissajous that would be played live, in the dark, on a unlabeled console contrasted with improbable digitally synthesized abstracts with ridiculous layers of masking and eye-melty modulation. This is an excerpt from a longer show.
Selecting the right music is always my first challenge. I'm a bit of a sucker for world music and I discovered Alex Boyé late one night while deep diving through YouTube. I liked the booming drum engine and the African vibe so I made a show that was just fun with big and expressive abstract eye candy in compliment to the upbeat tone. The motion is beat-synched with exponential curves to make the light feel more solid and I slipped in an Amiga tribute for added joy.
BEAMS AND SCREEN SHOW

A laser show that has both images on a projection screen, and also beams from around or through the screen. The projection screen images can use any combination of graphics and abstracts.

Nilsson
Lightline Lasertechnik

Music: Disney, “Celebrations of Earth”

This show was performed for a company anniversary.
**BEAMS AND SCREEN SHOW**

Second Place

**Audi**
Lightline Lasertechnik

*Music: Choosing Dauntless feat. Ellie Goulding*

For the presentation of the new R8 and A4 this show was made for a local Audi representative.
First Place

*Magic*
Dream Laser

*Laser: Anna Dmnitrieva*

*Music: Gathering Clouds; Epic Battle; Swankel; Tate, American Horror Story - Sweet Dreams; Triumphs of the Past; West One Music - The Scoring House*

The project is planned for seven lasers, animation projected onto two lasers. Also, the project uses a single projector.
**NIGHTCLUB/DISCO/MUSIC FESTIVAL SHOW**

A laser show which has been created for, and performed at, a nightclub, disco or music festival. The show can be of any format, including beams only, mixed beams and graphics, and live laser performances. The video must depict the actual show as presented on site with an audience – not filmed in a studio or an empty rehearsal hall.

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**Third Place**

*Escapade Music Festival*

LaserTech Canada

*Lasers: Derek Garbos, Nicolas Squire and Jordan Taylor*

*Music: Armin van Buuren & Knife Party*

One unique aspect of this show was the wireless control system. We use a special 5 GHz antenna array along with RTP MIDI and a remote desktop. This saves us from having to run long lines from stage to FOH and gives us a reaction time of 8 ms. At this event, the FOH was 120 meters away. Notice the perfect timing which was all performed live. To add excitement, it poured rain continuously for 3 days, but the show went on!
NIGHTCLUB/DISCO/MUSIC FESTIVAL SHOW

Skrillex EU Tour
KVANT

Customer: Lightwave International
Laser operator: Mark Nath
KVANT lasers and technicians support: Milan Lukacek and Tomas Krze
Music: Skrillex, “Breakn' A Sweat” and “Ragga Bomb”

We lit up the European tour of one of the best DJ producers known by the name Skrillex in cooperation with Lightwave. Eight powerful spectrum 20w and special effects ensured that Sonar festival in Barcelona, and Estathe market sound in Milano were lots of fun.
NIGHTCLUB/DISCO/MUSIC FESTIVAL SHOW

First Place

NV's Wicked Halloween
Dynamic Lasers

Designer: Shane Martz
Music: Big Gigantic & RL Grime - Various

This live event is submitted to show use of live lasers using effects to compliment music and not just "flash and trash"
CORPORATE SHOW

A laser show designed to market a specific product, or presented to an audience consisting of a company's employees or customers. The video must depict the actual show as presented on site with an audience – not filmed in a studio or an empty rehearsal hall.

Geovol
Laserworld Group

Laser graphics: Benjamin Kuchar

GEOVOL celebrated their successful drilling in Unterfoehring, Germany, with a spectacular laser show and laser logo and text projections. The major challenge at this event was the heavy wind, as a thunderstorm was coming up. Anyway, the show was very successful due to proper fog and haze distribution.
COrPORate Show

Second Place

Sap
Dream Laser

Laser: Anna Dmnitrieva

Laser show on the anniversary of the SAP company, animation for one RGB laser
KOH-I-NOOR 225th anniversary
KVANT

Director: Rudo Stritecky, Laser programmer: Martin Gabco, Videomapping: Art4promotion, Video technician: Matej Cernusak, Main technicians: Maros Starosta and Milan Lukacek

225th Anniversary of KOH-I-NOOR HARDMUTH world-famous color and pencil company were celebrating their 225th anniversary through colors as is their target of production. Video and laser mapping help put their colors message in to the large scale visual image done on an historical castle in Hluboka as symbol of their historical message “Painting the World since 1790.” We used five lasers for beam show and four lasers for laser mapping in timecode sync with video projection, lights and fireworks.
LIVE STAGE SHOW

An event such as a theatrical show or a music concert that features live performers and lasers, performing on a stage in front of an audience. The event is exclusively or primarily for the in-person audience. Other media such as lighting and video can be incorporated, but the laser must be featured.

ProLight and Sound 2015
KVANT

JUMBO Dance choreographer: Milan Keres, Laser programmer: Martin Gabco, Laser graphics designer: Tomas Krze, Video: Matej Cernusak

Fifty KVANT laser systems were set in circular configuration to perform many new and innovative laser effects and to achieve 100% safe laser show with absolutely no audience scanning.
A full arsenal of laser effects were required for KYGO’s world tour. KYGO performed in a central location on the stage so the focus of all laser effects were to encompass the performance area completely. KYGO was flanked by laser on all sides. The scanning units were placed higher up so we could use chrome plates on the downstage edge to get interesting scanning and beam bounce effects. Ten LaserBlade units, ten of RGB BeamBurst for safe audience exposure and four Ex21a full color OPS lasers were used in the rig. Control was handled via Pangolin’s latest BEYOND software and fully triggered via ArtNet from a HedgeHog4 out at FOH. Hazers were strategically placed around the venue to ensure the lasers were seen at their full potential.
Faithless: EU Tour
ER Productions

Designer: Andy Hurst
Laser programmer and operator: Lawrence Wright
Lasers were used in the following tracks: God is a DJ, Mass Destruction, Tweak, Insomnia, Hands, Everything Alright, What About Love I Want More Pt1, Bombs, Salva Mea, Not Going Home, We Come 1

The legendary dance act have always had a passion for lasers and this was clear on their album cover which used laserblades. The brief was to create structure and environments for the band. This included encompassing Sister Bliss on her riser in laser that was used at points for their keyboard bridges. Building structures is far simpler these days with the new array products. Three ceilings were formed for the band to play under with scanning units accompanying them on many tracks. Again the diffraction option in the RGB beamburst played a huge part for safe exposure which drew the audience into the performance.
Live TV Show

Footage from a TV production shot live, or live on tape (such as a singing competition, awards presentation or halftime show at a sporting event) where there is only one take with editing done live, there are bright stage or stadium lights, the lasers are one of many lighting and special effects, and the primary audience is the TV viewers. The entry must use footage from the final, broadcast production.

Opening City Arena - Trnava
KVANT

Director: Tomas Eibner, Manager: Michal Simkovic, Laser operator: Martin Gabco, Video projection: Matej Cernusak, Main technician: Maros Starosta, Music: Two Steps From Hell, “Victory”

We provided laser show, laser mapping, LED screens and video projection for the grand opening show of City Arena, a new Slovak football stadium. Technically it was the biggest event in Slovakia ever.
The X-Factor Final is always a huge occasion and this year was no exception. From previous years it was felt that the centre was lacking some effects but the challenge here is to incorporate placement into a rig where no positions exist. This is due to the huge video screen upstage which does not allow for this. Additional lasers were added on the upstage lighting truss to fill the space upstage centre to great effect. On the close shots you can see laser effect upstage of the performers so it really added the show. Fast turnarounds and quick changeovers meant limited programming time so the DMX fixtures are great for fast and efficient programming.
The video shows selections of the Zedd True Colors Tour, 2015. Lasers were used with lighting and video (instead of competing with them) at intricate parts of the show. All lighting, video, audio and F/X pieces were performed live each night by individual operators (no timecode was used). This is most prevalent in the fifth clip (Kern Karft) where Zedd plays the track at 130 BPM to a programmed 128 BPM laser cue and has to pitch it down to match the visuals.
Footage from a film, TV show, commercial or music video where different scenes are edited together. Usually the lighting can be controlled to enhance the lasers. This category is also for use of lasers as special effects lighting, for example in science fiction movies or TV commercials.

**Third Place**

**Samsung Galaxy Product Launch**

**Future Weapons**

*Laserist: Adam LaBay*

*Music: Samsung S6 Edge DOOH Film*

We created laser-heavy imagery for the Samsung S6 Edge product launch. This video was displayed on LED video panel billboards in six international markets. No camera sensors were harmed during many risky camera maneuvers.
A client approached us looking for a unique use of lasers for a music video. They loved our lumia work, so we concentrated on that, augmenting it with some standard beamage and animated outlines.

Laser art: Mike Gould.
All projectors built by Mike Gould
Live footage from the Windows 10 Hero Image production was used to create a promotional video showcasing the artistry involved in the Windows 10 project.

Note from ILDA: Microsoft’s official Windows 10 logo was created by using lasers projected through the edges of suspended glass. At right is a reverse view of how the logo was projected. As of August 2016, it is on 1/5 of all PCs worldwide – 350 million computers – not to mention product packaging, ads and marketing materials. This makes it probably the most-seen photograph of laser beams ever.
Laser Show with Added Effects/Multimedia

This category is for shows that have additional non-laser elements such as lighting, fireworks, video screens, etc. These shows can take place indoors or outdoors.

Third Place

Sinfonia Degli Elementi
Merlin Schaadt

Laser design and pyrotechnics: Merlin Schaadt
Water design: Christoph Grauting
Music: Various artists

This is the result when very young designers – all less than 23 – meet to create a big multimedia watershow. The aim was to create big atmosphere and not only a "show." We combined water, laser, flame, flame fountains and pyrotechnics to a symbiosis of the elements.
LASER SHOW WITH ADDED EFFECTS/ MULTIMEDIA

Second Place

Palladio
Visual Sensation Laser Shows and Technologies

Video creation: Dariusz Sienkiewicz and Mateusz Gurtowski,
Laser programming: Maciej Łukaszewski
Music: Escala, “Palladio”

Used equipment: Three RGB lasers, two green lasers and one Barco HDX W12 projector
LASER SHOW WITH ADDED EFFECTS/ MULTIMEDIA

First Place

Heartbeat of the Murray
Laservision

Laser effects artist and Mega Media engineer: Dan McCloskey
Animator: Al MacInnes
Creative director: Lloyd Weir
Music: Original soundscore

"Heartbeat of the Murray" was created, produced, engineered and installed by Laservision for Swan Hill Pioneer Settlement in Swan Hill, Victoria, Australia. Pioneer Settlement is an authentic Australian history experience set on three hectares located on the banks of the Little Murray River.

The main goals of Pioneer Settlement for our Mega Media show were to tell the rich history of the Murray River Region and do it in a creative and technologically advanced way unique to Laservision and the Mega Media assets we develop and provide.
The 23-minute immersive show takes audiences back millions of years to the beginning of the Murray River through to modern day, telling the diverse history of the Murray Region in seven unique acts: Megafauna Period, Aboriginal Dreamtime Story, European Settlements, Ports of the Murray, Food Bowl of the Nation, Modern Times, and the Finale.

Some of the challenges associated with this show – other than making an educational show fun and engaging to watch with unique mediums of lasers, waterscreens, video projection and special effects – was research into the history of the Murray Region. We spent many months working with historians, paleontologists, museums, native tribes and elders, community leaders and local experts to develop the content of the show that spans over 20 million years.

The site/venue of the show is also something we were very fortunate to be involved with. It is the first show that we’ve produced that incorporates the natural surroundings of the Murray River. We were able to use the forests and natural landscape to provide a fully immersive experience to the audience. We were also able to do this in a manner that did not impact the landscape ecologically and is considered a “green” project.
Lasers used in fine art applications. This can include works displayed publicly in galleries and exhibitions, works sold to private collectors, and works that are primarily intended for artistic appreciation or as artistic statements.

**Third Place**

**Fine Art Gallery**
Orion-Art Multimedia

*Art director and video design: Alexey Panin*
*Graphics: Kirill Nikitochkin*
*Music: The X-Ray Dog and 2 Steps From Hell libraries mix*

This laser show was made for the art gallery Penza for the opening of an exhibition. The audience coming to the exhibition, watched the show as laser and video advertising in the lobby of the gallery. The paintings of local Penza town artists were used as a foundation of the show.
INSPIRED BY DALI
LaserNet

Concept and execution: Tom Harman

Inspired by Dali is a laserist interpretation of a technical drawing Dali used during his creative process. We enlarged the scale to re-create this drawing in laser for a public art show.
Deep Web is a monumental immersive light art installation and live performance. The world premiere of Deep Web (February 2 - 7, 2016) as part of the CTM festival in Berlin was an overwhelming success.

Deep Web was originally commissioned by the Festival of Lights Lyon 2015 in cooperation with local producer Tetro. Due to the festival’s cancellation after the attacks in Paris, Berliners could enjoy this exclusive preview.

A matrix of 175 water-filled spheres hanging on motorized winches together with the beams from 12 high-power PHAENON X laser projectors formed a structure of lines and
dots hovering in space with ever changing colors and movements. The laser-lit spheres moved in synchronous choreography with the composition (8-channel surround sound) by Robert Henke.

Each laser projector was responsible for targeting 91 spheres. They were controlled by internal Lasergraph DSP's receiving position data of the spheres by OSC messages and color informations by ARTNET data. A specialized DSP software tool sent the laser beams precisely to the requested positions.

The shining, constantly changing structure with a total length of 25 meters and height of 10 meters, in connection with the electronic sounds created an impressive artistic visualization of the workings of digital networks with their nodes and connections. The spectacular industrial architecture of the Kraftwerk Berlin was the perfect venue for this installation.

Details:
• 1 Location: Kraftwerk Berlin
• 2 Artists: Robert Henke, Christopher Bauder
• 5 Days
• 12 Laser projectors: PHAENON X AT 25, PHAENON X Pro 30000
• 66 Laser modules Coherent TAIPAN
• 91 Spheres addressed by 1 laser projector
• 175 Winches manufactured by KINETIC LIGHTS
• 320 Watt Total laser power
• > 7000 Visitors
• Approx. 1200 pictures and videos on Instagram
This category is for novel or unusual laser applications that do not fit into any other category. Winners in the past have included Theo Dari’s “Laserman” magic act, an underwater laser show viewed from a glass-bottom boat, a raster-only show, and an interactive laser character that talks to passersby.

New Interactive Laserman
KVANT

Laserman and programmer: Martin Gabco
Laser graphic designer: Tomas Krze

Another new version of laserman. We don’t control just the beams, now we could control the whole world. Depending on the position of person in front of motion sensor, grids are changing their position, changing their shapes, deforming the space.
At first glance the trade show visitor does not see more than three large background prints at the Bosch Mobility Solutions exhibition stand. But all in a sudden a dazzling and elegant shine rushes over the images, just as if it was an integral moving part of the static motive. For this project we developed a new aesthetic approach for the use of lasers: Not dazzling bright in a dark environments, but in a rather subtle, reduced and elegant way, three laser projectors bring to life large background prints on this brightly illuminated stand. The stand creates a pleasant contrast to the omnipresent flashy standard LED screen setups on this trade show.
INNOVATIVE APPLICATION

On Your Wavelength
ER Productions

Designers: Marcus Lyall and Marc Webber
Laser programming: Alex Anpilogov

The public took part by wearing a headset that transmitted brain activity into spontaneously choreographed digital artwork on an architectural scale, creating your own visual soundscape.

Everyone was welcome to watch or take part in the stunning interactive light show. In a dark space, participants were fitted with an EEG head-set that monitors the electrical activity of their brain wavelengths. Data was then used to control the laser and sound composition; allowing thought patterns to directly modulate the physical light surrounding them.

The aim was to reach a focused ‘state of mind’, that can only be achieved through their ability to ‘let go’. The installation highlighted participants’ minds as tangible objects and generated a unique ‘brain signature’ for each user.
LASER PHOTOGRAPHY

A photo with laser as the dominant element. The photo must be of a single “click” of the camera. The photo may have darkroom-type improvements in Photoshop, such as cropping and curves. However, photo manipulation such as adding or removing elements is not permitted.

Third Place

Alpha Sphere

LOBO
Photography: Udo Gauss
Laser operator: Philipp Wendt
Creative director: Alex Hennig

Very interesting things happen performing a time exposure with minimum aperture on a moving laser projection. Contrary to its original appearance, the resulting grain in the photo gives the laser a natural touch, almost like hair reflecting sunlight, such as it happened to this photo looking like a magical sphere.
The Sound of Gravity
Christopher Short

Laser and photograph: Christopher Short

In February 2016, NASA announced the LIGO experiment detected gravitational waves caused by the merger of two black holes. The accompanying illustration showed an accretion disk with a helix of energy emitting from the center. Since the LIGO detector is a giant laser interferometer, I decided it would be fitting to do my own illustration using lissajous and lumia.
This image was created as an art project mostly on a whim by shooting a laser into a large snow bank. As the ice melted, stunning internal refractions occurred producing beautiful colors and texture, and revealing the internal structure of the snow bank. The end result was a vortex-like effect that looked like something from another world!
The Laser Jockey competition for live performance is held the evening before the Awards Presentation. The winners are not known in time for printing of this booklet; they will be announced at the Awards Presentation.

After the ILDA Conference, the online PDF version of this booklet will have the Laser Jockey winners’ names.
ILDA is looking for outstanding new talents in the laser entertainment industry by dedicating a special honor for exceptional creative achievement of new talents outside its membership. Every non-ILDA member is invited to enter a video of up to four minutes. An international jury then selects the winner. (The ten 2016 jury members are listed on page 5.) This is not an ILDA Award; it is a separate trophy.

**Tobias Zeides**

Tobias won for his entry *I, Frankenstein* (shown above). He receives recognition as the 2016 New Talent search winner, a one-year ILDA Membership, the New Talent star trophy, and free admission to the ILDA Awards Banquet to receive his trophy.
Lixel RGB is a patented high-power laser batten with individually controllable RGB sources designed to link end-to-end, or in two dimensions to create laser video walls. Lixel is controlled by DMX, video input, and many custom analog and digital interfaces.

Laser pitch is equal in horizontal and vertical planes, allowing endless linking of units. It is a broadly adaptable tool to allow artists to explore designs. Each element produces 4 watts of RGB power in the standard model. The elements are available in many configurations including linear strips, X-Y grids and organic shapes such as circles.
FB4 is a customizable laser controller hardware solution from Pangolin, which is integrated directly into a laser projector. It features removable SD memory and a custom OLED display, offering control of projector parameters including geometric correction, color adjustment/correction, safety settings, startup settings and more. FB4 can also be purchased with optional DMX or ILDA daughterboards.

FB4 is helping to move the industry forward, by allowing simple control of a laser projector from DMX, Artnet, OSC, ILDA (analog) input; control from software over a network; or simple standalone playback. Due to the proprietary network protocol used, up to 40 FB4s can be (and have been) controlled by a single computer using a standard 100 megabit Ethernet connection, and the protocol also supports use in wireless modalities.
BEYOND 2.1 Laser Show Control
and Multimedia Software
Pangolin Laser Systems

BEYOND 2.1 is a revolutionary laser show and multimedia control software, that helps users to easily combine laser, video, audio, lighting and more; for fully synchronized multimedia shows. The software is unique in many ways, including:

- Fully integrated multimedia playback including the ability to render video on the timeline in virtually any format and any resolution in real time, including effects such as size, position, volume, panning, and brightness.
- Fully integrated 3D animation program similar to 3D Studio MAX, C4D and Maya.
- Four separate abstract generators
- Full support for a wide variety of external protocols including DMX, Artnet, MIDI and OSC.
• Built-in, multi-threaded computer language (PangoScript) that supports looping constructs, global variables, transcendental functions, and basically everything that a real programming language supports.

• Ability to control up to 40 lasers simultaneously from a single PC.

• A “unified” approach, where all of this is accomplished within a single program and where all features are accessible at all times (i.e. the use of one feature does not prevent you from also accessing another feature at the same time).
For 2016, ILDA’s highest honor goes to Dr. Alexander Timofeyev of Orion-Art Multimedia.

In 1980 Alexander Timofeyev graduated from the Moscow Power Engineering high school majoring in Optoelectronics & Lasers where he was engaged in scientific work. He subsequently published over 50 laser-related research works and has 12 USSR Certificates of Invention (patents), as well as international patents.

In 1995 he began work in laser display, helping develop outdoor laser advertising using acousto-optics to create bitmap images. He received the highest award at the Brussels Salon of Innovations: Eureka 1996.

Shortly after that, Alexander became the co-founder and Chief Manager of Laser Show Systems Company (Moscow), which had become the largest company in the field of laser show systems at that time. It was the first company in Russia to integrate latest technologies and ILDA standards to the show
technology represented on Russian Market. In 1998 he began participating in the ILDA Conferences.

In 2003 Alexander became co-owner and general producer of Orion-Art Production International. In 2009 he became owner and CEO of Orion-Art Multimedia. The company is now one of the leading Russian companies in the field of laser and multimedia shows.

From the very beginning of his work in the laser display industry, he has been striving to improve the quality of laser graphics and animation. Orion-Art began submitting their works for the ILDA Awards in 2004. Since then they have won 45 ILDA awards: 27 of them are the first and/or second prizes in the Laser Graphics, Beams & Screens, Lasershows, and Multimedia Show categories.

In 2008 he was elected as a board member of the International Laser Association (LAS-Russia). Until 2011 he was heading the LAS' Department of Applied Laser Technologies in display systems, advertising and show-business. He was the first in Russia to introduce mandatory laser safety training and certification of technical staff working with lasers at laser displays.

The 2011 ILDA Conference in Moscow, hosted by Orion-Art, was acknowledged as one of the most interesting and successful in the history of ILDA, and gained a few new ILDA members from Russia.

Alexander Timofeyev believes that one of the key areas of his work is introducing new products and ILDA standards to the Russian market, maintaining the principles of ILDA ethics in working with partners, and compliance with ILDA safety standards.
Host
Image Engineering, Baltimore, MD
*Thanks especially to Joseph Suehle and Nisha Ramnath*

ILDA Conference Committee
Christine Jenkin, Chair

ILDA Board of Directors
*October 11 2015 - November 7 2016*
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Horacio Pugliese, Technical Director
Tim Walsh, Awards Committee Chair
Joseph Suehle, Master of Ceremonies
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