2019 ILDA Awards
The world’s best laser shows as judged by their peers
From the ILDA Bylaws

The purpose of ILDA is to advance and promote the professional application of laser display:

By maintaining standards of safety performance;

By promoting a better understanding between laser display professionals and regulatory agencies;

By fostering the development of new technology;

By promoting the advancement of laser artistry;

By increasing public awareness;

By providing information to the public; and

By promoting cooperation within the industry.

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Cover photo: “Power Plant” by LOBO
(zoomed in to central area, for vertical cover format)
First Place, Laser Photography, 2019
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2019 ILDA Awards • November 10 • Orlando
2019 ILDA Conference

Projector Sponsor
Pangolin Laser Systems / KVANT Ltd.

ILDA Conference Committee
Chair: Christine Jenkin

Awards Presentation

ILDA Technical Direction: Derek Garbos and Horacio Pugliese
Safety and Fire Watch Coordination: Greg Makhov
IDN Equipment: Dr. Matthias Frank, Dirk Apitz
Awards Committee Chair: Richard Gonsalves
Technical Committee Chair: Dirk Apitz

Safety Software Sponsor
Xtaega

ILDA Board of Directors
November 11 2018 - November 10 2019

President: Brian Gonzalez
Directors: Bradford Billet, Olga Eser, Roberta McHatton, Christopher Short
Secretary: David Kumpula

ILDA Executive Director
Patrick Murphy

Booklet and pop-up display printing
Brooks Palmer, FullColorLasers.com
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 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 the appropriate authorities. These authorities may include federal, state and local laser safety regulators, venue operators, and insurance companies.*
Judging and Voting

Artistic Awards

Judging was done in June 2019 via online viewing and voting. Judges were Brad Billet, Alex Douglas, Olga Eser, Hank Eskin, Christine Jenkin, Theo Petrides, Adam Raugh, Paulo Cesar Saito and Merlin Schaadt. Judging coordinator was Awards Committee Chair Richard Gonsalves. Together they reviewed 164 artistic entries from 42 ILDA Member companies.

Note that for each of the artistic award entry categories, there were three judges. However, these were not always the same three people. A person was not allowed to judge any category in which they had an entry, which is why there were nine persons serving as judges.

Laser Photography and Career Achievement Award

Judged by ILDA Members voting online, June 4 - June 18, 2019.

Laser Jockey

Judged by attendees watching the Laser Jockey performances live during the Lase-Off at the ILDA Conference in Orlando, November 9, 2019.

Fenning Technical Awards (standard and IDN)

Technical entries were judged via online discussion of a three-member panel that concluded July 12, 2019. Judges Bob Arkin, Tim Hallmark and Theo Petrides evaluated nine entries from six ILDA Members.
2019 ILDA Awards

International Laser Display Association
Laser and Multimedia Show
First Place
Acorp Annual Meeting Kickoff
Planetary Laser & Display Inc.
Corporate Show

Third Place, Corporate Show

SF Motors Launch

Lightwave International

Credits - Laser Programming and Light Designer: Pavel Zmunchila; Laser Technicians: Neal Nance, Brandon Dzurino; Show Design: Sila Sveta

Music - N/A

Laser mapping to video and actual cars unveils SF Motors' newest lineup.
Lokoland
Dreamlaser

Credits - Alice Soboleva, Olga Saveleva, Vyacheslav Konovalov, Catherine Studenova, Sergey Zabosin, Alexey Kozin, Alexander Istomin

Music - Anuch, "Epic"; Matthew L. Fisher, "Epic Cinematic Trailer"

The purpose of this project was the laser mapping of the front facade of the stadium with difficult construction, and displaying laser animation on banners, which interacted with each other.
FIFA World Cup Fanfest
Orion-Art Multimedia

Credits - Laser Graphics: Kirill Nikitochkin, Art Director: Alex Panin, Technical Director: Taras Viter
Music - Scout McMillan, "Polyhymnia"

The show was created for the world FIFA Fanfest entertainment program. The precise synchronization of the screen video with the laser beam movement made it possible to create the illusion of brutal burning the screen through with a powerful beam. The basis of the graphic part of the show was also performed in laser software, although it was intended to be shown as video on an LED screen due to technical requirements.
Imenella Live at P3Guld
Laserimage AB

_Credits_ - Programming: Love Karlsson, Laser Tech and Project Manager: Johan Lindell
_Music_ - Imenella, "Chagga"

A live broadcast music awards show. The producer wanted something to make this number more powerful so they chose laser on the dance solo just to give it some extra power.
Britain’s Got Talent
ER Productions


Music - David Guetta, "Sweat"; Ariana Grande, "Focus"; Macklemore & Ryan Lewis, "Ceiling Can't Hold Us"; Ed Sheeran, "Perfect" (opera version); Robert Miles, "Children"

This project saw us deliver five very different laser moments, using a full arsenal of laser fixtures, for the Britain’s Got Talent live show, held at the Eventim Apollo in London, for contestants Rise Unbroken, Gruffydd Wyn, and Shameer Rayes. We also provided 30 interconnecting laser fixtures for 2017 winner Tokio Myers, performing Children.
X-Factor
ER Productions

Credits - Laser Design: Ryan Hagan and Marc Webber, Laser Programmer and Operator: Joe Jackson

Music - Janice Robinson, "Clarity"; Ellie Goulding, "Close To Me"; Leona Lewis, "One More Sleep"; Cheryl Tweedy, "Love Made Me Do It"; Dalton Harris, "Life on Mars"

We provided a wide array of laser effects for the British talent TV show, The X-Factor, at the SSE Arena, Wembley, London. We created an unusual laser cone-shape, mapped onto set for Janice Robinson, magenta laser choreography for Ellie Goulding, for Scarlett Lee and Leona Lewis’s duet we created an X-Factor cross shape. We framed the catwalk-style stage with magenta and white lasers for Cheryl’s live performance and for winner of the competition, Dalton Harris, we programmed a range of full color RGB lasers.
Tatra Ice Temple
KVANT Ltd.

Credits - Programmer: Jakub Dibdiak
Music - Unspecified 123

This was very challenging project where we supplied seasonal installation of laser show systems inside of a gigantic ice sculpture. The permanent temperature was set to minus 12 Celsius degrees. What we found the most interesting were the visual effects of laser beams pointing in the ice, the light was distributed in an unusual way.
Creed 2
Lightwave International

Credits - Lasers: Mike LiConti, Mike Dunn, George Dodworth
Music - Tessa Thompson, "I Will Go to War"

Adonis Creed and Rocky Balboa enter the arena in dramatic fashion highlighted by intense lasers for the film's final climactic fight.
MJ-Sergio
KVANT Ltd.

Credits - Programmer: Martin Gabco
Music - Sergio, "Man In The Mirror" (Michael Jackson cover)

Sergio's performance blew us away and made us proud of being his partner for laser show production and support. He is not only an amazing impersonator but also a great singer, since what you hear and what you see is both Sergio.
Special Antiterror Forces
Orion-Art Multimedia

Credits - Laser Graphics: Kirill Nikitochkin, Art Director: Alex Panin, Project Management: Taras Viter
Music - Immediate Music

The show was made for the special antiterror forces anniversary celebration. This units were established for carrying out highly complex anti-terrorist operations. The unit consists of military professionals, ready to engage in battle with terrorists in any part of the world, using the most modern means of landing and movement.
Mansion Wedding

Merlin Schaadt

Credits - Storyboard and Laserdesign: Merlin Schaadt, Pyrotechnician: Niklas Ambrock

Music - Max Cameron, "Fira"; Hans Zimmer, "Planet Earth II"; Audiomachine, "Blood And Stone"

In this show I wanted to create a very monumental wedding show using not very many separate lasers. So I had to create something with five projectors. In addition I created a very precise timetable for pyro shots. At the beginning of the show my aim was to catch the audience from the first second with big sound, precise pyro and lasers. After that we slow down and start a beautiful part to flow in dreams with graphics of the bridal pair. For the closing and firework final the sound is rising again and keeps the intensity high again.
Angel
Dreamlaser

Credits - Alice Soboleva, Olga Saveleva, Vyacheslav Konovalov, Sergey Zabosin
Music - Scorpions, "Send Me an Angel"

The show has integrated animation of the dance of real people. Also used rotoscoping technique to create atmospheric effects, in particular to create water. For this show we used six laser projectors and one projector for video content.
Spherical Show
KVANT Ltd.

Credits - Programmer: Martin Gabco, Vladimir Štefánek
Music - Reach For The Dead; Hans Zimmer "Hunger"

This was the first time that we created a spherical/planetarium show. We built a spherical dome 25 meters in diameter and played with video projectors and lasers. This show was the result of one month experimenting. The main idea was to try it and since we liked the result very much, the spherical show became our temporary showroom for clients.
Holiday Laser Dome
Lapis Laser Display

Credits - Designer/Show Operator: Garrett Crabtree, Designer/Producer: Ryan Daly

Music - Dean Martin, "Let it Snow"; Trans-Siberian Orchestra, "Carol of the Bells"; Lindstrøm, "Little Drummer Boy"; The Strokes, "I Wish It Was Christmas Today"

To make a pop-up style planetarium that could be casually enjoyed fans of Christmas, who by their very nature are light show enthusiasts.
Age of Machine
Copernicus Science Centre

Credits - Mateusz Wyszyński
Music - Scandroid, "2517"

The style of new retrowave music and cyberpunk animations are great both for planetariums and for lasers. To test this hypothesis we created a short show for the Scandroid’s song '2517'. Both lasers and pixel art animations are created by us. Using video mapping effects, we make animations on the dome and lasers correspond with each other, which makes the show unique. This is a standalone short show, which hopefully will expand into a bigger project in the future.
Sunrise Festival 2018
Visual Sensation Lasershow & Technologies

Credits - Laser Designer/Operator: Maciej Lukaszewski, Laser Operator: Jaroslaw Nadolny
Music - Various artists

This was the biggest music festival in our country. When we saw the stage design, we immediately knew that the stage decorations should be used for graphic projection. Two nights of programming onsite gave an incredible effect during the festival.
Second Place, Nightclub/Disco/Music Festival Show

FEQ Chainsmokers
LaserTech Canada

Credits - Live Operator: Nicolas Squire, Technicians: Derek Garbos, Joel Decarie, Nicolas Squire

Music - Various songs by the Chainsmokers

All lasers were run live and live-controlled on the fly. The lighting director only gave us a few minutes or seconds to create the upcoming desired effect. The stage was over six stories tall and the result was super bright and massive! Total laser power: 280 watts pure white balanced RGB.
First Place, Nightclub/Disco/Music Festival Show

Back & Forth 4.0
Visual Sensation Lasershow & Technologies

Credits - Laser Designer/Operator: Maciej Lukaszewski, Laser Operator: Jaroslaw Nadolny
Music - Various artists

(No Statement of Intent submitted)
Crossroads Church Laser Harp
_Laser Spectacles, Inc._

_Credits -_ Laser Harp Performance: Tim Walsh

_Music -_ Paul O’Neill & Robert Kinkel, "Wizards in Winter"

This piece was part of the church’s annual Christmas service, and was intended to provide a "Wow!" moment, by introducing a laser harp front and center of the stage. All of the music is performed live by the church band, with the laser harpist playing the lead melodies live as well.
Chemical Brothers

ER Productions

Credits - Laser Design: Marc Webber, Laser Programmer and Operator: Tom Vallis

Music - Chemical Brothers: "Chemical Beats", "Hey Boy Hey Girl" and "Got Glint"

We joined the British electronic duo Chemical Brothers for their 2018 World Tour. As part of the theatrical and immersive experience, our lasers had an important part to play, and included a number of carefully-planned cues. We created a stunning atmosphere during five tracks using 18 laser fixtures, (eight positioned along the downstage edge, eight upstage, and two located behind a screen on kinesis pods), one 30w laser for grating effects positioned centrally on a lifting column, a 24w OPSL laser centre stage, and four custom-built lasers inside the eyes of the robots, who appeared to come to life.
Lineate
LaserTech Canada and C:LAB

Credits - Creation: Adam Hummell, Catherine Nadeau; Production: Gabrielle Pauzé for C:Lab, The Creative Laboratory of Cirque du Soleil; Acrobatic Artist: Valérie Doucet; Composer: Lunice; Acrobatic Performance Design: Philippe Aubertin, Germain Guillemot; Choreographer: Émilie Therrien; Lasers and Programming: Derek Garbos, Nicolas Squire; Technical Direction: 4U2C; Hair and Makeup: Audrey Toulouse

Music - Composed by Lunice

"Lineate" proposes an ephemeral architectural space where lines, both virtual and corporeal, intersect in a singular moment of performance. This project began as a workshop exploring the possibilities of laser technology in direct dialogue with live acrobatic performance, projections and sound. A meditation on geometry and balance, the result is a hybrid performance where the architectural form remains perpetually in motion -- creating a compelling space in which the borders between viewer and the performer are constantly being re-drawn.
Multi-Effect Laser Show

Third Place, Multi-Effect Laser Show

WOW HOW - Juniors Science Festival
Orion-Art Multimedia

Credits - Laser Graphics: Sergey Maltsev, Art Director: Alex Panin
Music - Clement Marfo & The Frontline, "Champion"

The show was made for the Juniors science festival. It presents various experiments, physical phenomena and mechanisms that could be studied at this festival.
Greece: From Ancient to Modern Times
Orion-Art Multimedia

Credits - Laser Graphics: Kirill Nikitochkin, Art Director: Alex Panin
Music - Immediate Music

The show was made as an introduction of the Greek Independence Day celebration. It was necessary to show the ancient origins of modern Greece. It was also important to pay attention to significant historical figures and events of recent history.
Guitar Mapping New Year 2019
Lasershow-Creation

Credits - Showdesign/Soundmix: Tobias Gebuhr
Music - Royal Philharmonic Orchestra, "Auld Lang Syne"

As something special for every new year's "laser wishes", I created a 3D mapping show in my acoustic guitar, showing the right strings and finger tabs with laser graphics on how to play "Auld Lang Syne".
Colour Lovers
Visual Sensation Lasershow & Technologies

Credits - Laser Designers: Anna Nadolna, Maciej Lukaszewski
Music - Jules Gaia, "Shake Down"

The show was created for the youngest viewers. The message was to be positive and the show was to be colourful and cheerful.
New Year 2019
Dreamlaser

Credits - Alice Soboleva, Olga Saveleva, Vyacheslav Konovalov, Catherine Studenova, Sergey Zabosin
Music - No title - New Year potpourri

This show was created by using our vision of the topic of New Year 2019.
Special Delivery
David Kumpula

Credits - David Kumpula

Music - Tchaikovsky: "Dance of the Sugar Plum Fairy", "Chinese Dance", "Russian Dance"

This show employs the use of a custom glow-in-the-dark laser projector to draw both soft fill effects and sharp lines to create an extremely detailed image in a fun way.
Abstract Show

Third Place, Abstract Show

Analogue Burn
Christopher Short

Credits - Christopher Short
Music - Tom Jones & The Cardigans, “Burning Down the House”

I love Talking Heads. Don’t get me wrong, but Tom Jones. And this is just a fun song. Lissajous flame effects and tunnels. Lots of motion and layers and geometrics. Just a fun show to go with a brilliant bit of music.
Abstract Truth
Christopher Short

Credits - Christopher Short
Music - Shpongle, “Divine Moments of Truth”

This is a trip. A hallucination through a surreal landscape with of the mind. An assault on the inside of your eyes.
Set the Controls
Christopher Short

Credits - Christopher Short
Music - Bassomatic, “Set the Controls for the Heart of the Bass”

This is a single projector abstract show to the best house music to come out of the 1990’s...Bassomatic. I've always loved this song and have been dying to do a show to it.
Fusion
Igor Vlasenko

Credits - Programmer and Video Operator: Igor Vlasenko
Music - Really Slow Motion, "Nothing Can Stop Us"

Something cosmic and epic unfolds somewhere in consciousness. Small but emotional show.
Second Place, Beams/Atmospherics Show for a Single X-Y Scanner Pair

**Toy**

*VisuTek e.U.*

Credits - Programmer: Markus Voggenberger, Setup and Laser Operator: Helmut Gruber

Music - Netta, "Toy"

This year we chose the song "Toy" performed by Netta from Israel and created a very powerful beamshow. It was the winning song from the 2018 Eurovision Song Contest and an answer to the #metoo debate (sexual harassment in the entertainment industry).
First Place, Beams/Atmospherics Show for a Single X-Y Scanner Pair

**Scars**

*RadLab Laser Systems*

![Image of a tunnel show with colorful laser lights](image)

**Credits** - Show Design, Music Mixing/Editing, Camera Footage: Rad Drobny

**Music** - Ilan Bluestone Feat. Guiseppe De Luca, "Scars"

Designed as a fully immersive tunnel show without any scanning near the center, this is intended to be scanned at long range over large scan angles, while maintaining safe limits above below and on the sides of a static seated audience. This method was used to give the illusion of crowd scanning without scanning into the crowds.
Beams/Atmospherics Show with Outboard Effects

Third Place, Beams/Atmospherics Show with Outboard Effects

Activate
Theo Petrides

Credits - Programmer/Designer/Operator: Theo Petrides
Music - Au5, "Activate"

This show makes you feel like you can take on the world. It has a fast-paced electronic music beat and also slow dynamic changing rhythms that will show that the artist can work in a dynamic setting.
Humanity

LOBO

Credits - Show Designer: Diana Coenen, Chief Creative Officer: Matthias Müller-Quernheim
Music - Hans Zimmer, "Once Upon a Time in Africa" from Madagascar 2

Every day, people are confronted with emotions. All over the world these feelings are similar. Hectic moments and pure soul relaxation are known from every creature in our world. These feelings are shown in reactions. "Humanity" reflects these parts in our lives in a rotation between hard stormy and peaceful soft sequences.
Tecnoids

LOBO

Credits - Show Designers: Diana Coenen, Christina Fink, Chief Creative Officer: Matthias Müller-Quernheim

Music - Woodkid, "Run Boy Run"

The character of this laser show is defined by an outstanding very special rhythmic sound reminiscent of galloping horses chasing the main character through different sceneries marked by the constant change between a fast and a slow music sequence. Every laser beam hits a single beat of this characteristic sound, leading those watching the show through a battle between mirrors and beams and a world full of contrasts in rhythm, color and light.
Beams/Atmospherics Show for Multiple-Scanner Projectors

Third Place, Beams/Atmospherics Show for Multiple Scanner Projectors

Nemesis
VisuTek e.U.

Credits - Programmer: Markus Voggenberger, Setup and Laser Operator: Helmut Gruber
Music - Sound Adventures, "Nemesis"

Here we created a fast and powerful show with precisely timed effects. For this special arrangement we used the music from Sound Adventures from their dark, epic and modern, hybrid/orchestral album "Nemesis".
Unbreakable
VisuTek e.U.

Credits - Programmer: Markus Voggenberger, Setup and Laser Operator: Helmut Gruber
Music - Two Steps From Hell, "Unbreakable"

According to the new album from Two Steps from Hell "Dragon" using the song "Unbreakable“, we created a really impressive beamshow with precisely timed effects. In this arrangement we used nine pure diode laser systems.
Lakes of Flame
Theo Petrides

Credits - Programmer/Designer/Operator: Theo Petrides
Music - Blue Stahli, "Lakes of Flame

Lakes of Flame is a laser show that harnesses the power of aggressive guitar riffs, with industrial type of beats, and cinematic sections all incorporated precisely to the movement of the lasers.
Innovative and Fine Art Laser Applications

Third Place, Innovative and Fine Art Laser Applications

Close Encounters
Greenwave Laser

Credits - Technical Director: Paul Clark, Creative Director: Antonia Coppen
Music - Close Encounters of the Third Kind soundtrack

An arts cinema screening of Close Encounters of the Third Kind (Director's Cut), augmented with immersive laser effects, shown to an audience of 140 people. Effects included liquid skies, moving abstracts and a custom replica of the famous music 'scoreboard'. Fifty-seven interactions were cued live to the film with a MIDI keyboard and control pad connected to our custom laser control software, using IDN to drive the laser. The cinema, in a historic building, had limited height and wall space. So in order to maintain safety clearances, the effects were mapped onto nine areas with perspective transformation.
**ASOT**  
*KVANT Ltd.*

Asot Haas is a fine artist who incorporates audio waves into visual art. The lasers are displaying the sounds which are hidden in creations of Mr. Haas.

**Credits** - Programmer: Martin Gabčo  
**Music** - Unfold.Alt Noise creation
Laser Light Synths

Seb Lee-Delisle

Credits - Seb Lee-Delisle
Music - N/A

Laser Light Synths is a large-scale interactive light installation that gives you the experience of being a rock star, even if you can’t play any traditional musical instruments! As you play the custom-made synths, powerful laser beams respond to the music and synchronised animated visuals cover the entire building. The synths have been designed to use a carefully selected musical scale so they remain in perfect harmony with each other. The brightness of the lasers, and the powerful sound system produce an intense and awe-inspiring experience for the audience.
Mukor Rules
Christopher Short

Credits - Christopher Short

This is a photograph of a UV-projected abstract. Abstracts removed from the time domain and turned into weird fragments of oscilloscope dreams with slow phosphor and improbable shapes. The creation of strange geometries by the motion and repetition of basic shapes. And Mukor, he rules all the galaxies.
What looks like the colorful reflections on a liquid surface in movement is actually a close-up of fog in a laser tunnel effect enhanced through the use of fog. Laser tunnel effects are probably the most fascinating effects, giving laser light an especially plastic appearance thanks to the generated fog but catching this magic from a close distance is not less fascinating.
Power Plant

LOBO

Credits - Chief Creative Officer & Photographer: Matthias Müller-Quernheim

Modern light meets plant life. Drawing outlines on essentials. The plant was spotted with colorful patterns from one scanner at a distance from 17 meters. The projection area was only 10x10 cm.
The Laser Jockey competition for live performance was held the evening before the Awards Presentation. Winners were:

**Third Place**

**Michal Pokluda**  
*Showtacle Ltd.*

**Second Place**

**Derek Garbos**  
*LaserTech Canada*

**First Place**

**Garrett Crabtree**  
*Lapis Laser Display LLC*
Illuminatus Lasers specializes in interactive laser displays. These are designed to be used at art events, Maker Fairs, and festivals, and are specifically targeted to families and kids.

The Laser LunchBox is an audience-interactive controller for our custom-made lumia projectors ("Lumiators"). It is designed to control the brightness of a monochrome lumia projector, and the speed of the two rotating glass discs that modulate it.

There are six controllers, and they are built into vintage lunchboxes, which are colorful, cheap, and cheerful.

Controls consist of knobs made of jeweled drawer pulls, shiny chrome plated switches, and LED readouts for the speed controls. The LED readouts, shiny switches, and knobs are
irresistible to kids. The readouts also contain the PWM circuitry that controls the motors spinning the lumia discs; the jeweled knobs connect to these.

There are LEDs built into the lids of the lunchboxes, which enable the controls to be seen at night. These also support good lighting for photography of the happy participants.

The power supply lunchbox is equipped with E-stop, key switch and other standard safety features. This supplies 12V DC to all the lunch boxes; hitting the switch kills all the projectors.
Live Feedback
LaserNet (Laser Production Network)

Live Feedback is laser industry oriented data acquisition hardware and software created to monitor and control up to 30 laser projectors. This control can be used with the same Ethernet cable used to send laser graphics to the projectors.

The hardware can monitor 18 TTL signals for key activation, interlock, e-stop or failures, 16 analog signals for optical power measuring, voltages or any analog signal, and 1 I2C line to monitor temperature and humidity inside the system. It also provides control outputs: 8 TTL outputs to control activation of circuits, 1 I2C line to control stepper motors and such.

Besides the screen information, the software can send warnings and feedback in the form of TCP and/or SNMP. The firmware for each projector type is easily configured to support the status and control functions of that particular model. If the projector is configured to allow remote commands over the protocol, the projector will shut down (or stop emitting, given the case) if a control signal is not received every 0.25 seconds.

It can be easily linked to work with Beyond Universe and most visualization software.
Fiesta for Mac
Showtacle Ltd.

Fiesta for MAC is a completely new software to create and perform live or music synchronized laser shows. And it’s running on native Mac OS. But it’s not only about new operating system.

It allows the user to create amazing live laser show scenes using the tools they’re used to use only in shows. A completely new way of controlling all the properties of transformations using standard graphic keyframe tools allows user to precisely control every millisecond of the scene.

There is a huge support for multi-laser scenes as well. The base timeline of every scene already allows you to create multi-laser content. And it also comes with a completely new way of splitting laser graphics into multiple lasers – using layouts.

Generally, layouts allow you to arrange your laser anyway you want – split your graphics horizontally, vertically or any other crazy way. What’s really saves a lot of time when creating laser show scenes for multiple lasers is the simple delay transformation. It’s just one line in timeline, but the resulting “time-offset” effects are incredible.

The new animation library is probably the most powerful library ever implemented in the laser show software. It not only allows you to store interesting animations – you can reuse even
complete graphics with your animations and then use them in other scenes or shows as well.

Integrated graphics editor is perfect feature for currently popular laser mapping. And thanks to direct integration, you can draw your graphics using multiple lasers at once. And you can use new 2D color effects improve your mapping animations.

Thanks to reliable Mac OS system the software allows control of 30 lasers at once without any problem – not using DMX or ArtNet but by direct laser animation rendering in real time.
Prototype of IDN Recorder

University of Bonn, Institute of Computer Science 4 (Laser and Light Lab)

The IDN-Recorder is a set of two software elements that can be used to record, store and replay laser shows (including stereo audio) on the basis of IDN (ILDA Digital Network) streams. It can be used standalone or in conjunction with the IDN-Switcher.

In the latter case, the IDN-Switcher can redirect all IDN laser data streams to the IDN-Recorder, while the show is visible live on all laser projectors. In addition, the computer running the IDN-Recorder is also connected to the audio mixer, for recording and replaying the stereo audio signal. Later on, the IDN-Recorder can replay an IDN recording to the IDN-Switcher, which will use exactly the same configuration (mapping of streams to the respective beam and graphic projectors).
In the standalone mode, the IDN-Recorder behaves as an ordinary IDN consumer (in parts implementing the pre-standard IDN Service Discovery). An IDN-capable system can direct one or several IDN streams to the IDN-Recorder for recording. In case of non-IDN-capable systems, the ISP StageFeed ISP-DB25 to IDN converters can be used to “grab” the signal from any laser DAC. The IDN-Recorder can discover ISP StageFeed devices and can trigger the recording.

For playback, the IDN-Recorder uses the pre-standard IDN Service Discovery and the user can select to which laser projector (IDN consumer) a recorded IDN stream should be directed.

The IDN-Recorder prototype currently consists of two parts. For performance reasons, the main IDN-Recorder process is running on a Linux computer. This computer has an audio interface (preferably a high-quality USB audio device, rather than using built-in sound cards) and needs to have fast and large storage capacity (preferably SSD devices).

The second component is a graphical user interface (GUI) implemented in the Java programming language. Therefore, this component can be executed on any device, independent of operating system (Windows, MacOS, Linux, ...) or form factor (desktop, laptop, Java-capable tablet, ...). The Java GUI is used to control the IDN-Recorder process remotely over a local area network (wired Ethernet or also Wireless LAN). With the GUI, the user can configure the IDN-Recorder, start recordings, browse the archive of recordings and can trigger playback of recordings (similar to using a typical media player).
IDN Laser Virtual Reality

*University of Bonn, Institute of Computer Science 4 (Laser and Light Lab)*

IDN-Laser-VR is a novel approach to real-time laser show visualization in virtual reality.

With IDN-Laser-VR you can dive into an immersive 3D laser experience. The IDN-Laser-VR prototype was created with the Unity3D game engine and works with any SteamVR compatible VR headset. IDN discrete graphics mode as well as IDN continuous graphics mode are supported.

The number of available virtual laser projectors can be configured. Depending on the performance of the computer/laptop and the graphics card, the reference scenario of annual ILDA meetings can be used for IDN-Laser-VR (e.g. seven aerial/beam laser projectors as used in Montreal, Canada at the ILDA 2018 conference).
First Place, Fenning Technical Achievement (IDN)

IDN Consumer Prototypes

*University of Bonn, Institute of Computer Science 4 (Laser and Light Lab)*

This IDN award entry is about IDN consumers for Laser Projector and DMX512 Service. For each service, a low-cost device composed of off-the-shelf hardware components receives a network data stream according to the IDN stream specification and is able to generate the appropriate electrical control signals for ILDA ISP-DB25 (Laser Projector Service) or DMX512.

We developed two separate prototype devices (as a combination of commercial off-the-shelf available hardware and software) for receiving IDN streams and generating the appropriate electrical control signals for Laser Projector Service (ILDA ISP-DB25) and ILDA ISP-DMX / DMX512 for laser projector effects and/or light effect devices. Each prototype is a composition of available hardware, available software (e.g. operating system, network and interface drivers) and own software dealing with IDN specific aspects and creating the required output signals for each service.

The main motivation for developing our prototypes is to provide a reference, proof-of-concept implementation of IDN
consumers at the lowest possible price of COTS hardware components. We decided to put together separate devices for Laser Projector and DMX512 service because these two services have significantly different requirements on the necessary performance and the separation keeps the complexity for a proof-of-concept prototype at a reasonable level.

**Laser Safety Course Students**

ILDA offered three laser safety courses immediately prior to the 2019 Conference. These students attended the courses (and for the LSO course, also passed the test given at the end of the course).

**Laser Operator Course**
Xavier Boyer, Stephen Davis, Isak Mozard, Jamie Roderick, Michelle Saintey, Andrew Shalda, Chris Wheeler, Mateusz Wyszynski

**Audience Scanning Safety Course**
Martin Gabco, Andrew Shalda, Sally Steranko, Stefan Ünal, Chris Wheeler

**Laser Safety Officer Course**
Jeremiah Atkins, Xavier Boyer, Martin Gabco, Donald Gamsjager, Isak Mozard, Jamie Roderick, Michelle Saintey
Alberto Kellner-Ongaro has been active in the entertainment industry since 1985. He first worked in PR and event organizing for a show agency in Milan. Since 1987, he has worked with lasers. In May 1988 he founded Laser Entertainment srl. The focus of the company was to use and promote lasershows among the entertainment industry and related markets in Italy and in southern Europe, since spreading to the Middle East. Also, from the beginning Alberto has been fascinated by the use of lasers together with other media techniques (video, lights, special effects) to create a real "multimedia show".

Since the first large scale waterscreen installed in Gardaland in 1995 (ILDA Award first place, Multimedia, in 1996), Laser Entertainment has received more than 30 international awards and recognitions between ILDA and other first place prizes from groups such as the European Lasershow Festival, BEA, and the Pepsi Award.
Alberto and his creative team have been pioneers in graphic lasershows creation using different software platforms (Laser System Magnum, LOBO Lacon 3, Pangolin), bringing and sharing high quality "state of the art" lasershows to the industry. Furthermore he has developed and assembled innovative laser products, including:

- The first 2 watt RGB DPSS solid state projector presented at ILDA in Las Vegas 2004 and winner of the ILDA Award for DPSS laser of the year called "Flash 2 watt RGB"

- The first laser projector with both integrated wireless DMX and Pangolin Flashback to allow show recall and play via wireless DMX, finished in 2007 and presented at the ShowWay 2008 exhibition in Bergamo, Italy.

Since 2010 Alberto and his team have pushed forward the integrated use of laser, lights and video mapping 3D to allow a unique multimedia experience.

Laser Entertainment was the first Italian company to join ILDA, in 1993. Since then Alberto has been an active member promoting the safe use of laser in Italy, southern Europe and the Middle East. Alberto served on the ILDA Mascom committee in 2002 and 2003, then as Board member in 2004, and served as ILDA President from November 2004 to March 2006.

Alberto joins these past CAA recipients:

1989 Ivan Dryer
1990 Seiji Inatsugu
1991 Floyd Rollefstad
1992 Jennifer Morris
1993 Robert Mueller
1994-2003 (not awarded)
2004 Patrick Murphy
2006 Doug McCullough
2009 Greg Makhov
2010 Lothar Bopp
2011 Stephen Heminover
2012 Tom Harman
2013 Pavol Kubošek
2014 Tim Walsh
2015 Dirk Baur
2016 Dr. Alexander Timofeyev
2017 Alex Hennig
2018 Glenn Thomas
Official Projector Sponsor

Thank you to Pangolin, our official projector sponsor for 2019, for providing the KVANT lasers used at the Lase-Off/Laser Jockey competition and at the Awards Presentation.