

ALAN 2018 preliminary schedule

Sunday, November 11

12:00-6:00 PM (tentative) Registration - Lobby- Ballroom 1

16:00-18:00 Skyglow presentation, **Gavin Heffernan & Harun Mehmedinovic - Ballroom 1**

18:30-20:00 Reception, pommes frites station, cash bar - **Golden Cliff**

Monday, November 12

8:00-9:00 Breakfast, registration open & poster setup - **Ballroom 2**

8:45-9:00 session chair meeting - **Cirque**

Oral Session 1 – Opening Session

Ballroom 1

Chair: John Barentine

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| 9:00-9:25 | Welcome to ALAN! Welcome to Utah! | |
| 9:25-9:50 | Alan Matheson Jr. | Utah's commitment to dark skies |
| 9:50-9:55 | Rebecca Dilg | Utah Governor's Office of Economic Development |
| 9:55-10:15 | Daniel Mendoza | Urban Emissions and Nightlights |
| 10:15-10:35 | Sara Pritchard & Erin McLaughlin | Describing artificial light at night: Keywords in light pollution literature and why they matter |
| 10:35-10:50 | Dave Kieda & Stephen Goldsmith | The University of Utah Consortium for Dark Sky Studies |
| 10:50-11:10 | Coffee break | Ballroom 2 |

Oral Session 2 – Technology & Design

Ballroom 1

Chair: Nancy Clanton

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| 11:10-11:25 | Poster session elevator pitches | |
| 11:25-11:50 | Vellachi Ganesan | From Singapore to Salt Lake City: Perspectives of Lighting and Darkness Design |
| 11:50-12:10 | Bob Adams | Letting the Stars Shine |
| 12:10-12:30 | Bruce Kinzey | Decoupling Outdoor Lighting from Sky Glow |
| 12:30-12:40 | Discussion & conclusion | |
| 12:40-13:45 | Lunch | |
| 13:45- 15:30 | Poster Session 1 - Ballroom 2 | |
| 15:00-15:30 | coffee available | |

Posters:

| | Presenter | Title |
|----|--------------------|---|
| A1 | Abraham Haim | Loss of the Night Darkness by Artificial Light at Night (ALAN) – Is It a Loss of Ecosystem Services? |
| A2 | Alexandre Simoneau | Hyperspectral study of the impact of private lighting on skyglow at the Asiago Observatory, Italy |
| A3 | Constance Walker | Globe at Night: An Awareness Campaign to Reduce Light Pollution |
| A4 | Amit Green | Exposure to Screens of Digital Media Devices, Sleep and Concentration Abilities in Israeli Adults |
| A5 | Cooper Farr | Addressing the impact of light pollution on birds in Salt Lake City, Great Salt Lake and its Wetlands |
| A6 | Jochen Krautwald | Ecolinguistical analysis of knowledge transfer of the topic of artificial outdoor lighting |
| A7 | John Barentine | Do International Dark Sky Places Stay Dark After Accreditation? |
| A8 | Kai Pong Tong | Measuring European angular distribution of upwelling artificial light with the Suomi NPP VIIRS–DNB |
| A9 | Kellie Pendoley | Environmental Management Light Pollution Guidelines for Marine Turtles, Seabirds and Migratory Shorebirds |

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| A10 | Li-Wei Hung | From HPS to LED: the plan for measuring changes in skyglow before and after a countywide lighting retrofit project |
| A11 | Martin Morgan-Taylor | Modelling and measurements of Light pollution at Malvern Hills AONB, for the effect of Herefordshire conversion to blue-rich LED lighting. |
| A12 | Melissa Hey | Light pollution and faunal community effects on litter decomposition |
| A13 | Nicole Rodriguez Cavero | Using Astronomical CCD Imagery Techniques for the Study of Urban Light Domes at a Small College |
| A14 | Salvador J. Ribas | Interaction of clouds and fog with the measure of Night Sky Brightness |
| A15 | Sharolyn Anderson | The All-sky Light pollution Ratio (ALR) characterized using field data and modeled VIIRS data |
| A16 | Stan Moaraf | Artificial light at night increases survival of new neurons and suppresses melatonin in birds |
| A17 | Susanne Stephan | Effects of skyglow on physiology and diurnal rhythm of phytoplankton strains |

Oral Session 3 - Parallel Session

Session 3a Mixed session

Ballroom 1

Chair: Kellie Pendoley

Session 3b Lighting regulation

Maybird

Chair: Sibylle Schroer

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| 15:30-15:50 | Oren Levy | Martin Morgan-Taylor |
| | Coral reproduction and the timing of spawning in the era of rapid urbanization and ecological light pollution (ELP) | The Island of Saint Helena as an example of Metrics Based Legislation to Address Artificial Light at Night Problems and to Promote Dark-sky Tourism |
| 15:50-16:10 | Andreas Jechow | Benedikt Huggins |
| | Winter (and arctic) light pollution: a new frontier? | Legal restrictions on artificial light at night |
| 16:10-16:30 | Adam Mitchell | Sébastien Giguère |
| | LED Lighting: Fighting the brightening on turtle nesting beaches | 10 years of social engagement: lessons from Mont-Megantic's International Dark-Sky Reserve |
| 16:30-16:50 | Jeremy White | Nancy Clanton & April Stevenson |
| | A citizen science approach to quantify illuminance levels of sea turtle habitat in Gulf Islands National Seashore | Helping Communities Develop a Lighting Ordinance |
| 16:50-17:00 | Discussion & conclusion | |
| 17:00-18:30 | Optional open discussion in poster room - Ballroom 2 | |
| 17:15-18:15 | Workshop: Light assessment in epidemiological studies - Cirque | |
| 19:00 | Mixer and stargazing - Twin Peaks/Pool Level 10 | |

Tuesday, November 13

Oral Session 4 – Plenary session - Society

Ballroom 1

8:00-9:00 Breakfast, registration open & poster setup - **Ballroom 2**

Chair: Dietrich Henckel

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| 9:00-9:25 | Josiane Meier | Contentious Lighting: Understanding Lighting Conflicts |
| 9:25-9:40 | Poster session elevator pitches | |
| 9:40-10:00 | Andreas Hänel | From Research to Practice: ALAN in Star Parks in Germany |
| 10:00-10:20 | Noelle Glines-Bovio | Best Management Practices for Mitigating Social and Ecological Impacts of Artificial Lighting at Night on BLM-Administered Lands |
| 10:20-10:40 | Megan Bonham | Representing the Night Sky: Examining the Roles of 'Lay Experts' and Sensory Experiences in Dark Sky Preservation |
| 10:40-10:50 | Discussion and Conclusion | |
| 10:50-11:10 | Coffee break - Ballroom 2 | |

Oral Session 5 - Parallel session

Session 5a M&M

Ballroom 1

Session 5b Biology & Ecology

Maybird

Chair: Salvador Ribas

Chair: Liz Perkin

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| 11:10-11:30 | Brian Espey | Anat Barnea |
| | Monitoring public lighting in Ireland: using space imagery and lighting inventories | Artificial Light At Night Increases Neurogenesis And Suppresses Melatonin In Birds In A Dose-dependent Manner |
| 11:30-11:50 | Geza Gyuk | Cecilia Nilsson |
| | NITELITE: a High-Altitude Balloon (HAB) framework for angularly dependent temporal sensing of light pollution | Migratory birds' exposure to artificial light at night at the continental scale |
| 11:50-12:10 | Kai Pong Tong | Itay Malek |
| | Characterizing local properties of artificial light at night | Reproductive and Body Mass Responses of Australian Budgerigars (<i>Melopsittacus Undulatus</i>) to Short Wavelength Artificial Light at Night (ALAN) Exposure: Is it an exceptional Avian Model? |
| 12:10-12:30 | Zoltán Kolláth | Kamiel Spoelstra |
| | Spectral survey of sky quality | Rhythms in the dark: direct and systemic impact of light at night on temporal organization of activity |
| 12:30-12:40 | discussion & conclusion | discussion & conclusion |
| 12:40 – 14:00 | Lunch | |
| 14:00-15:30 | Poster Session 2 - Ballroom 2 | |
| 15:10-15:30 | coffee available | |

Posters:

| | Presenter | Title |
|-----|-------------------------------|---|
| B1 | Adam Mitchell | Sky42 - Measuring light with autonomously operated DSLR cameras: Generation II |
| B2 | Ariadna Garcia Saenz | Evaluating Artificial light at night (ALAN) risk exposures in gastroesophageal cancer and chronic lymphocytic leukemia in Spain (MCC-Spain study) |
| B3 | Alexandre Simoneau | Call for features: New light pollution model |
| B4 | Constance Walker | "Dark Skies for All": Public Engagement on Light Pollution |
| B5 | Dan Duriscoe | Using broadband CCD photometry and spectroscopy to identify sources of sky glow |
| B6 | Dénes Száz | Dual ecological trap of the night-swarming mayfly Ephoron virgo at lamp-lit bridges in Europe |
| B7 | Salvador J. Ribas | Pyrenees La Nuit: Pyrenean strategy for the protection and improvement of the nocturnal environment |
| B8 | Salvador J. Ribas | The Sky of Montsec: How a Dark Sky is Impacting the Economy of a Rural Area in Catalonia |
| B9 | Inbal Ayalon | The effect of ecological light pollution on the physiology and recruitment on coral reefs from Eilat Red Sea |
| B10 | Jacqueline Degen | Combining radar technology and all-sky imagery to study flight to light behavior of moths |
| B11 | Jennifer Liu | Growth and development of African Clawed Frog (<i>Xenopus laevis</i>) larvae reared under different intensities of LED light at night |
| B12 | Janet Wong | Use of Live Sky Quality Meters for Outreach and Public Awareness |
| B13 | Ken Walczak | NITELITE: An Open Source Stratospheric Light Pollution Imaging System |
| B14 | Kornél Kolláth | Monitoring the night sky at Lake Balaton |
| B15 | Paul Marchant | Major Errors in Research on Lighting and Public Safety |
| B16 | Roland Dechesne | Integrated study of Sky Glow, Calgary, Alberta, Canada |
| B17 | Randy Nelson | Disruption of endogenous circadian rhythms by exposure to light at night accelerates pancreatic tumor growth in mice |
| B18 | Bryant Buchanan & Sharon Wise | The effect of artificial light at night (ALAN) on activity patterns of a nocturnal salamander |

Oral Session 6 - Parallel session

Session 6a Mixed session

Ballroom 1

Chair: Constance Walker

Session 6b Biology & Ecology

Maybird

Chair: Susanne Stephan

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| 15:30-15:50 | Benjamin Banet | Franz Hölker |
| | From Brighter than the Moon to Dimmer than the Stars: Hemispherical Photography of Nighttime Illumination Across the American West | Illuminating lakes: assessing skyglow effects in ecosystem-scale experiments |
| 15:50-16:10 | Rosalía Lugo | Franziska Kupprat |
| | Youth Organization for Lights Out: Engaging Chicago Youth in Light Pollution Research and Activism | Melatonin concentrations are decreased by very low intensities of artificial light at night in European perch (<i>Perca fluviatilis</i>) |
| 16:10-16:30 | Sibylle Schroer | Simone Giavi |
| | STARS4ALL – Citizen science to save European nightscapes | Street lamps disrupt flower-visitor interactions beyond the illuminated area |
| 16:30-16:50 | Roland Dechesne | Elizabeth Perkin |
| | What Went Wrong? The Failure of New York City's Crime-Reducing Lighting Scheme | Stream Insect Acclimation to ALAN |
| 16:50-17:00 | Discussion & conclusion | |

Conference dinner

Goldenclyff –19:00-20:30

Welcome from Lumican CEO David Mitchell

Keynote by **Shirlee Silversmith**

Wednesday, November 14

Oral Session 7 – Health

Ballroom 1

8:00-9:00 Breakfast, registration open & poster setup - **Ballroom 2**

Chair: Christopher Kyba

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|-------------|---------------------------|--|
| 9:30-9:55 | Eva Schernhammer | Night shift work, cancer risk, and beyond: new insights from epidemiological studies |
| 9:55-10:15 | Manolis Kogevinas | Artificial light at night (ALAN), blue light spectrum exposure and colorectal cancer risk in Spain (MCC-Spain study) |
| 10:15-10:35 | Kristan Aronson | Residential outdoor light at night and breast cancer risk in Vancouver, British Columbia |
| 10:35-10:45 | discussion & conclusion | |
| 10:45-11:05 | coffee break - Ballroom 2 | |

Oral Session 8 – Measurement & Modeling

Ballroom 1

Chair: Li-Wei Hung

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|---------------|---------------------------|--|
| 11:05-11:30 | Ron Gibbons | The Balance of Roadway and Outdoor Lighting |
| 11:30-11:50 | Ranjay Shrestha | NASA's Black Marble nighttime lights product suite |
| 11:50-12:10 | Rémi Boucher | IDA's first International Dark-Sky Reserve is 10 years old: Monitoring the evolution of night sky brightness over Mont-Megantic's protected dark sky |
| 12:10-12:30 | Christopher Kyba | A proposed method for estimating regional and global changes in energy consumption for outdoor lighting |
| 12:30-12:50 | Hector Linares | Modelling the night sky brightness and light pollution sources of Montsec protected area |
| 12:50-13:00 | discussion & conclusion | |
| 13:00 – 14:20 | lunch & take down posters | |

Oral Session 9 – Biology and Ecology

Ballroom 1

Chair: Franz Hölker

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|-------------|---------------------------|---|
| 14:20-14:45 | Neil Carter | Effects of artificial light at night on wildlife habitats: integrating science with decision- support tools |
| 14:45-15:05 | Jeffrey Buler | Nocturnally-migrating birds traverse Earth's most light-polluted regions, and bright lights confound their habitat use en route |
| 15:05-15:25 | Tim J. W. Walles | Zooplankton response to "skyglow" revealed by high-resolution in-situ video in large experimental lake enclosures |
| 15:25-15:35 | Discussion | |
| 15:35-15:40 | Announcement of ALAN 2020 | |
| 15:40-15:45 | Conference wrap up | |