



The Loss of the Night Network (LoNNe)

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What is COST?



Oldest and widest European intergovernmental framework for transnational cooperation in science and technology

Since 1971 COST supported networking of research activities across all its member countries (36 today) and beyond

Open to all disciplines science and technology ideas and to all categories of partners

Supported by the EU Horizon 2020 formerly by the RTD Framework Programme, European Science Foundation, and the Council of the European Union

COST aims at building a European Research Area (ERA) in supporting networking within multidisciplinary research

Loss of the Night Network (LoNNe) COST Action ES 1204, 2012-2016

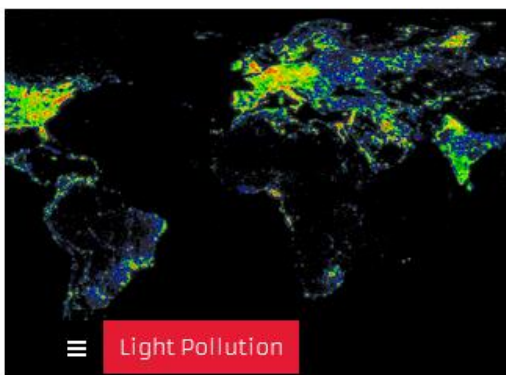


Studying the multifaceted aspects of artificial light at night

Transfer of existing knowledge between the fragmented national research projects

Stimulating future transdisciplinary and supra-regional research

Initiating dialogue regarding light pollution with the whole range of concerned and involved stakeholders, in particular the general public



Light Pollution

Thanks to the authors of The New Atlas of Artificial Night Sky Brightness a worldwide overview of increasing light pollution... [Read More](#)



Light Pollution

From May 2 to May 7, 2016, the fourth Intercomparison campaign organised by LoNNe was held in Catalunya, at the Parc... [Read More](#)

EVENTS

Final LoNNe conference

on September 26, 2016

September 2016

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		
« Aug					Oct »	

The Network

institutions from 18 countries

16 different disciplines

67 active members

biannual meetings



Agriculture
Astronomy
Astrophysics ,
Biogeography
Chronobiology
Communication
Technology
Conservation
Design
Ecology
Geography, GIS
Law
Light
Engineering
Physics
Statistics
Urban Planning

Four ecological research facilities



LichtOpNatur, NIOO, NL
forest -edge setup



Loss of the Night, IGB, DE
riparian ecosystem infrastructure



Ecolight, Exeter University, UK
grassland experimental setup

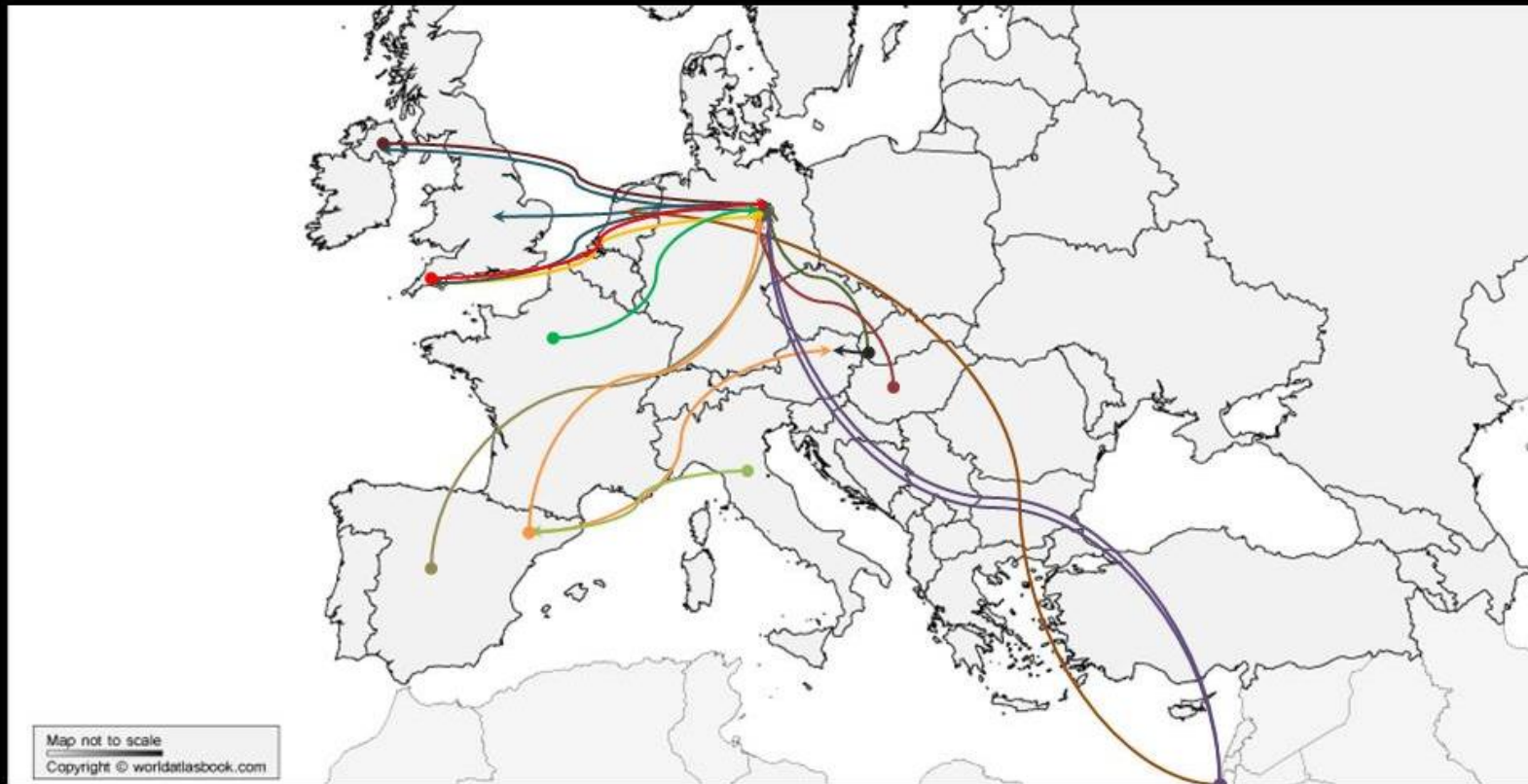


ILES, IGB, DE
lake facility ,

Short-term Scientific Missions (STSM)

Inter-laboratory exchange visits, to strengthening the network particularly intended for early career investigators (ECI).

LoNNe conducted 17 STSMs involving 9 countries and 10 ECIs



Training Schools



Intercomparison of Light Pollution Measuring Techniques
30/08-08/09/2013 in Lastovo, HR

Lighting Design Training School (LiDe3)
05/10-10/10 in Berlin, DE

Festival of Light 10/10/2015 Dora Kourkouli

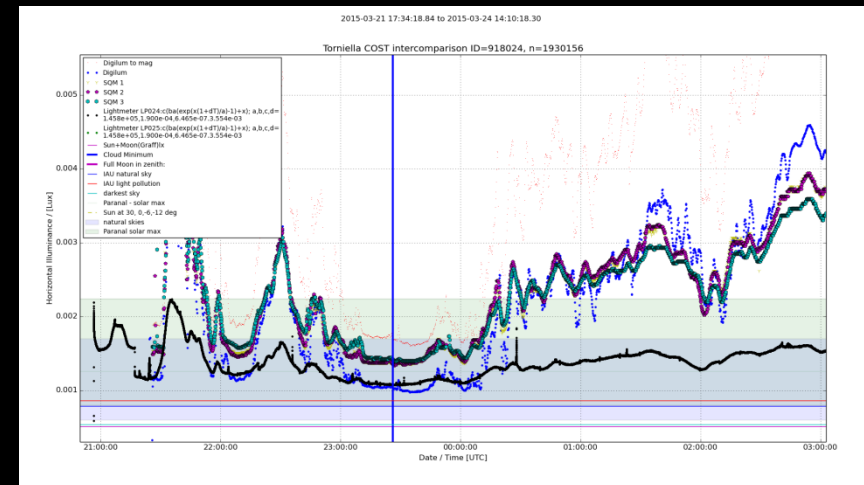


Intercomparison Campaigns

Development of light pollution measuring techniques and models



1. 2013 Lastovo, HR
2. 2014 Madrid, ES
3. 2015 Torniella / Florence, IT
4. 2015 Chelmos, EL
5. 2016 Parc Astronòmic Montsec

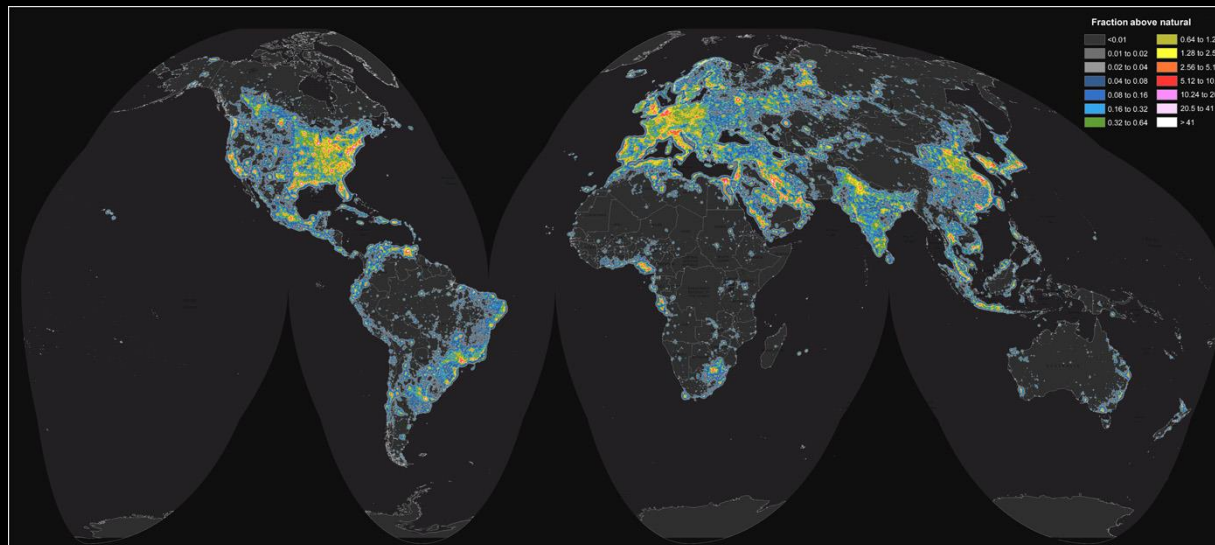


Publications on light pollution measurement

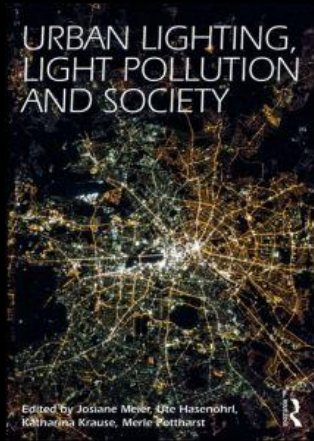
Worldwide variations in artificial skyglow (2015) Kyba et al. *Scientific Reports* 5

The new world atlas of artificial night sky brightness (2016) Falchi et al. *Science Advances* 2, no. 6

Current techniques and problems involved in light pollution (in preparation). Haenel et al. To be submitted to *Sensors*



Publications



Meier, Hasenöhrl, Krause, Pottharst (2015):
Urban Lighting, Light Pollution and Society
Routledge, Taylor and Francis Group

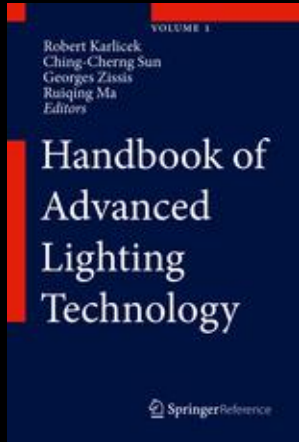


Theme issue (2015): The biological impacts of
artificial light at night: from molecules to
communities (eds) Gaston, Visser and Hölker

14 Articles about light pollution research

8 Articles by authors from LoNNe

Publications



Goerges Zissis et al. (ed)

Light Pollution Reduction (2014)

Schroer and Hölker

Impact of Lighting on Flora and Fauna (2016)

Schroer and Hölker

International
Journal of
Sustainable
Lighting

Editors in chief

Jeong Tai Kim, Kyung Hee University, Republic of Korea

Dorin Beu, Technical University of Cluj-Napoca, Romania

Founding editor

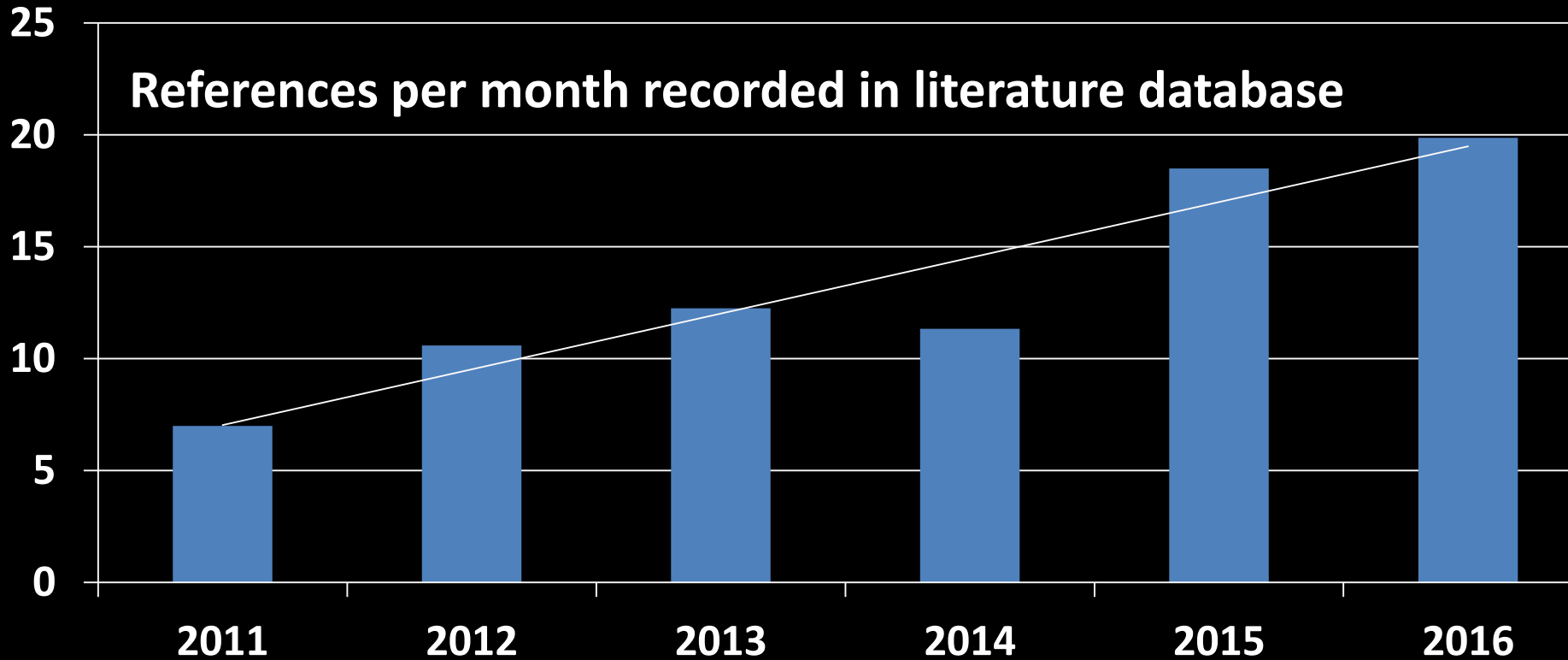
Florin Pop, Technical University of Cluj-Napoca

Editorial board members

4 LoNNe members

Literature database:

<http://darksky.org/resources/research/alan-database/>



< 2012 = 635 records

2012-2016 = 792 records

International conferences - ALAN series

I. 2013 in Berlin, DE *

II. 2014 in Leicester, UK *

III. 2015 in Sherbrooke-Québec, CA

IV. 2016 in Cluj, RO *

*= supported by COST



Statements

General outdoor illumination:

0% uplight ratio (ULOR=0),

avoidance of blue light < 500 nm or colour temperature < 3000 K ,

scientific justification of illuminance levels in EU standards
(EN 13201 or ANSI/IES RP-8)

Nature protected areas:

0% uplight , the light source shall not be visible at any distance

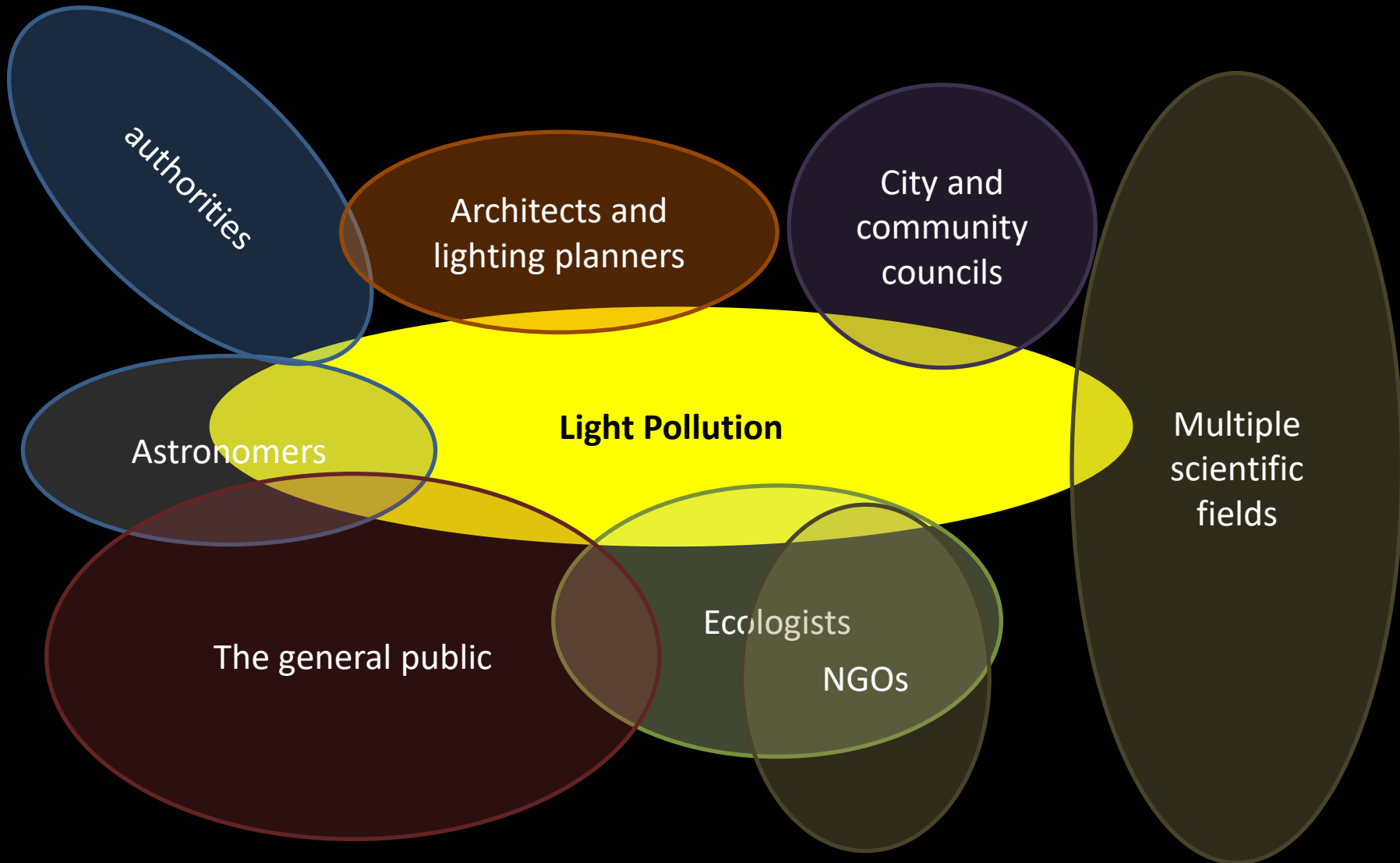
Average luminance: rural streets ≤ 0.3 cd/m² (4 lx), residential street ≤ 2 lx , floodlight ≤ 2 cd/m² on the illuminated area

2000 K light should be favored

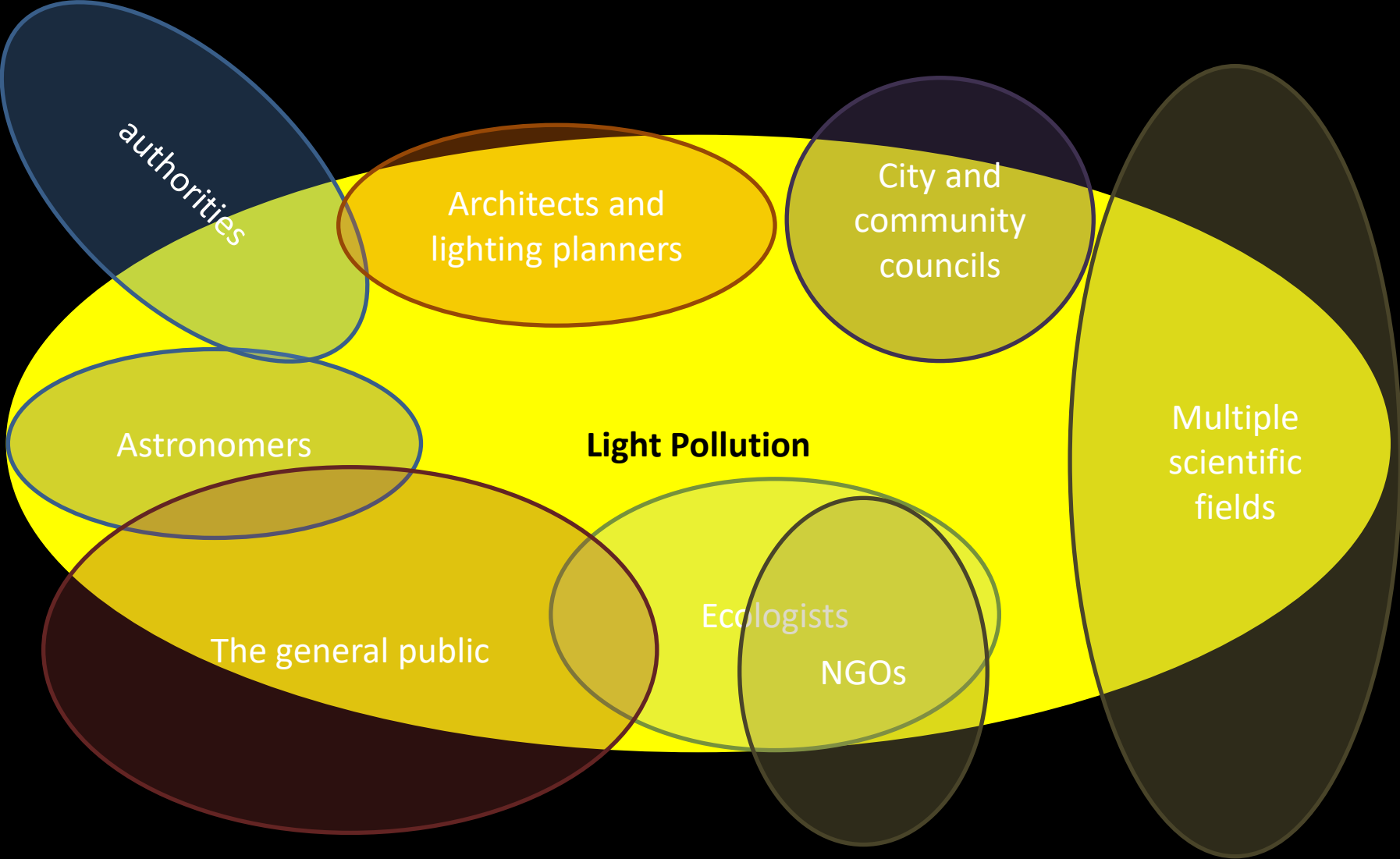
Blue light shorter than 480 nm should ideally be less than 10% of the total amount of light in the visible range.

Frequent monitoring of the sky brightness

Outreach and dissemination today



Outreach and dissemination aim



authorities

Architects and
lighting planners

City and
community
councils

Astronomers

Light Pollution

Multiple
scientific
fields

The general public

Ecologists

NGOs

Stars4all EU-CAPS Project

The initiative "**Collective Awareness Platforms for Sustainability and Social Innovation**" (CAPS) aims at increasing awareness of sustainability problems and offering collaborative solutions based on networks, enabling new forms of social innovation.

CAPS are expected to support environmentally aware, grassroots processes and practices to share knowledge, to achieve changes in lifestyle, production and consumption patterns, and to set up more participatory democratic processes.



STARS4ALL

A Collective Awareness Platform for Promoting Dark Skies in Europe

Marcus Neustetter's Sutherland dome is representing the right of "stars for all" - photo by Bruno Letarte

Citizens awareness about the problem of light pollution.

Invite the public to contribute in the detection, documentation, verification and solution of specific local light pollution problems.

Recommendations oriented towards consumers, industry, governments and public institutions to take care and protect dark skies.

Create Light Pollution Initiatives (LPI)



LPI 1: Broadcasting Events



LPI 2: European Sky Protection...



LPI 3: Lighting Quality Label



Images by Thomas Posch

LPI 4: The Beauty and the Beast



LPI 5: Detecting Inefficient Insi...



LPI 6: European Photometer N...



LPI 7: European Cities at Night



LPI 8: Empower Citizens Actions



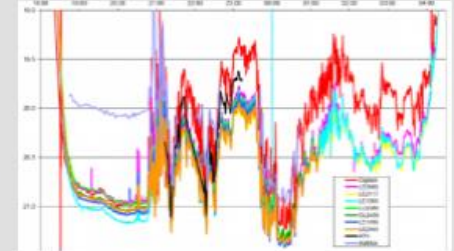
LPI 9: Light Pollution Outreach



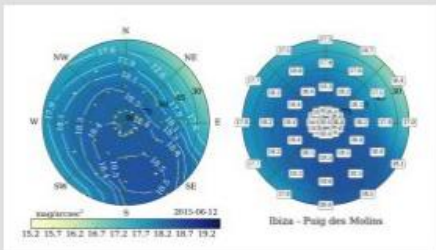
LPI 10: Loss of the Night



LPI 11: My Sky at Night



LPI 12: Intercomparison Camp...



LPI 13: NixNox

How Can I participate in a LPI?



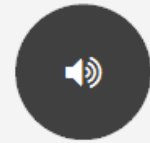
Creating your own LPI

With our CAPS Toolbox, you will be able to create A LPI with the help of other users.



Generating data

You can collaborate with us deploying sensors, playing games or using social networks



Spreading results

You can help us translating documents to your native language or sharing STARS4ALL content in social networks.



Funding the project

You can fund your favorite initiatives and actions

Thank you LoNNe it was a pleasure!

Crater Ramon, Israel– March 2016 – photo: Zoltán Kolláth



LPTMM – 2017

Light Pollution : Theory, Modelling, and Measurements
June 27-30 2017, hotel Terradets, Cellers, Spain

[home](#) [topics](#) [deadlines](#) [registration](#) [proceedings](#) [programme](#)

www.lptmm.org



Main

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Light Pollution: Theory, Modelling, and Measurements



Conference will be held in hotel Terradets, Cellers, Spain
June 27-30 2017

SEARCH

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ALAN 2018

Local organizing team

Hosting organization: Committee for Dark Sky Studies (CDSS) / University of Utah

Local organizing team: Janet Muir, Dave Kieda, Stephen Goldsmith (possibly also Kathrine Skollingsberg and Katherine Grader)

Cooperating partners from IDA: Scott Feierabend, John Barentine

Location: Snowbird, Utah, USA



Additional information

- Date TBA, but probably early November
- 45 minute drive from Salt Lake City Airport (shuttle bus)
- Airlines with direct flights to Europe through Delta & partners (e.g. KLM, Air France)
- Room rate under negotiation, but expected to be around \$119/night (can be split for 2 students)
- Possibility of IDA general assembly directly preceding ALAN 2018
- Local hosts have considerable conference organizing (and fundraising) experience

ALAN 2016 Final Conference



Thank you Dorin!!

