

Session	FM 2 Towards a World Standard for Dark and Quiet Sky Protection								
4-Aug-22									
	Program				Speakers	Type of Participation			
	Program	Slot	Category	Name	Abs. no.	Title			
Morning e-Poster							IN-PERSON CHAIR #1 NAME	REMOTE MODERATOR #1 NAME	
Morning Oral Session (FM2-1)	1-1			Constance E. Walker		Welcome	In-room Talk	Narae Hwang	Olga María Zamora Sanchez
	Section 1: Introduction to the Growing Threat of ALAN								
	1-2	Invited Talk		James Lowenthal	2300	Overview of Artificial Light at Night and Dark & Quiet Skies II recommendations	In-room Talk		
	1-3	Contributed Talk		John Hearnshaw	1141	Light pollution: a unified global solution is needed for a global environmental problem	In-room Talk		
	1-4			Moderator 1		DISCUSSION			
	Section 2: Astronomical Site Protection							IN-PERSON CHAIR #2 NAME	REMOTE MODERATOR #2 NAME
								James Lowenthal	Richard Green
	2-1	Invited Talk		Sarah Broughton	909	Impact of diffuse artificial light for different kinds of observations: optical wide field surveys	Remote Talk		
	2-2	Contributed Talk		Javier Diaz Castro (with Casiana Muñoz-Tuñón)	683	The OTPC (Technical Office for the Protection of the quality of the Sky) of the IAC. Experience on Sky Law regulation	Remote Talk		
	2-3	Contributed Talk		Zouhair Benkhaldoun	937	Site Protection in Morocco: Modelling the light pollution	Remote Talk		
	2-4	Contributed Talk		Richard Wainscoat	1075	Protection of the dark night sky over Hawaii's observatories	Remote Talk		
	2-5	Contributed Talk		Ramotholo Sefako	2159	SAAO Site Protection against Light and Dust Pollution	In-room Talk		
	2-6	Contributed Talk		Abd El Fady Morcos	2029	Monitoring Light pollution at Kottamia Astronomical Observatory	Remote Talk		
	2-7	Contributed Talk		Alemiye Mamo Yacob	1523	Astronomical site protection in Ethiopia	In-room Talk		
	2-8	e-talk		Exodus Chun-Long Sit	1412	Dark Sky without Borders: Besides Astronomers, How to Interact and Build Consensus with Stakeholders from Other Disciplines?	e-talk		
	2-9			Moderator 2		DISCUSSION			
	Section 3: Dark Sky Oases							IN-PERSON CHAIR #3 NAME	REMOTE MODERATOR #3 NAME
								John Hearnshaw	Pedro Sanhueza
3-1	Invited Talk		Antonia Varela Pérez	2740	Starlight Foundation: Night sky preservation and local socio-economic development.	In-room Talk			
3-2	Contributed Talk		Hidehiko Agata	1200	The status of light pollution in Japan and its relation to astrotourism	In-room Talk			
Lunch									
Afternoon Oral Session 1 (FM2-2)	3-3	Invited Talk		Ruskin Hartley	2490	IDA's international program for dark sky preserves as a model	Remote Talk		
	3-5			Moderator 3		DISCUSSION			
	Section 4: Measuring and Modeling ALAN							IN-PERSON CHAIR #4 NAME	REMOTE MODERATOR #4 NAME
								Ramotholo Sefako	Angel Otarola
	4-1	Invited Talk		Hector Linares Arroyo	2196	Modeling to Mitigate the Impact of ALAN	Remote Talk		
	4-2	Invited Talk		Salvador J. Ribas	602	Measurement for Regional Monitoring	Remote Talk		
	4-3	Contributed Talk		Ana Ulla-Miguel	1558	The Gaia4 Sustainability project: assessing light pollution aided by natural night sky brightness modelling	Remote Talk		
	4-4			Moderator 4		DISCUSSION			
	Section 5: ALAN Policy and Implementation							IN-PERSON CHAIR #5 NAME	REMOTE MODERATOR #5 NAME
								Piero Benvenuti	Ruskin Hartley
	5-1	Invited Talk		Yana Yakushina	1401	Legal protection of dark skies above major observatories	Remote Talk		
	5-2	Contributed Talk		Christian Adam	2452	Applying astronomical techniques to characterize ground-based light pollution sources	Remote Talk		
5-3	Contributed Talk		Pedro Sanhueza	2356	The Chilean Norma Luminica and the research group on ALAN	Remote Talk			
Break									
Afternoon Oral Session 2 (FM2-3)	5-5			Moderator 5		DISCUSSION			
	Section 6: Radio Astronomy							IN-PERSON CHAIR #6 NAME	REMOTE MODERATOR #6 NAME
								Federico DiVruno	Ashley Vanderley
	6-1	Contributed Talk		Federico DiVruno	2319	Radio astronomy and the quest for clean spectrum (including ITU-R protections)	In-room Talk		
	6-2	Contributed Talk		Gyula I. G. Józsa	2364	How radio frequency interference affects astronomy	In-room Talk		
	6-3	Contributed Talk		L. Viktor Tóth	2878	Endangered frequency bands	Remote Talk		
	6-4	Contributed Talk		Divya Oberoi	1352	Managing Radio Frequency Interference at the Giant Metrewave Radio Telescope	In-room Talk		
6-5	Contributed Talk		Karen Masters	1653	Update on Activities of The US National Academies' Committee on Radio Frequencies	In-room Talk			

Final List of Presenters

PLEASE NOTE:

- 1) Each IAU Grant Recipient received the registration fee amount for in-person registration, since they were presenting during FM2.
- 2) Three presenters (Gyula, Ashley Zauderer and Federico Di Vruono) each gave two talks.
 - a) There were 45 presenters in total, including 2 e-posters and 2 e-talks and 44 in-room + remote talks.
- 3) One remote speaker could not connect the first day and Pedro Sanhueza could not connect the second day.
- 4) No information was provided to the FM2 SOC Chair on M, F or non-specified. Apoloigies in advance if assumptions were incorrect.
 - a) Names in Column C whose cell are shaded peach denote female; all others are male
- 5) Countries listed in Column D.
- 6) Green colored cells in Column F with the word IAU represent who received IAU grants.
- 7) Column J shows who gave contributed Talks (30)(yellow) vs invited talks (14)(blue cell) or an e-talk (2) or e-poster (3).

No.	Presenting Author			Registration Info.		Abstract Info.			Categories		Co-Authors	
	Prefix	Name	Country	Reg. Type	Grant Application	Session	Abs no.	Abstract Title	abstract category	in-room/remot e	Prefix	Name
1	Dr.	Bevin Vanderley	United States of America	In-person	IAU	FM 2	2890	Impacts to U.S. Ground-based Astronomical Facilities	Contributed Talk	Remote Talk		
2	Dr.	Bevin Vanderley	United States of America	In-person	IAU	FM 2	2889	Radio Astronomy Dynamic Coordination Zones	Contributed Talk	Remote Talk		
3	Prof.	L. Viktor Tóth	Hungary	In-person	IAU	FM 2	2878	Endangered frequency bands	Contributed Talk	In-room Talk		
4	Dr.	Antonia Varela	Spain	In-person	X	FM 2	2740	Starlight Foundation: Night sky preservation and local socio-economic development.	Invited Talk	In-room Talk		
5	Mr.	Tim Stevenson	United Kingdom	In-person	X	FM 2	2633	The Industry hub of the IAU Centre for the Protection of the Dark and Quiet Sky	Contributed Talk	In-room Talk		
6	Dr.	Yunfei XU	China	Virtual	IAU	FM 2	2622	Impact Prediction of Megacostellation Satellites on Gravitational Wave Follow-up Observation Based on Virtual Simulation	e-Talk		Dr.	Yunfei XU
7	Ms.	Jessica Heim	United States of America	In-person	X	FM 2	2531	Community Engagement	Invited Talk	Remote Talk		
8	Mr.	Ruskin Hartley	United States of America	In-person	IAU	FM 2	2490	IDA's international program for dark sky preserves as a model	Invited Talk	Remote Talk		
9	Dr.	Christian Adam	Chile	In-person	IAU	FM 2	2452	Applying astronomical techniques to characterize ground-based light pollution sources	Contributed Talk	Remote Talk	Dr. Dr.	Eduardo Unda-Sanzana Jeremy Tregloan-Reed
10	Dr.	Gyula I. G. Józsa	Germany	In-person	X	FM 2	2364	How radio frequency interference affects astronomy	Contributed Talk	In-room Talk		
11	Mr.	Pedro Sanhueza	Chile	In-person	IAU	FM 2	2356	The Chilean Norma Luminica and the Research Group on ALAN	Contributed Talk	In-room Talk	Mr. Mr. Mr. Mr. Mr.	Rodolfo Angeloni Marcelo Jaque Guillermo Damke Juan Pablo Uchima Diego Fernandez
12	Mr.	Federico Di Vruono	United Kingdom	In-person	IAU	FM 2	2320	Large LEO satellite constellations: Prospects for interference and threats to radio astronomy	Contributed Talk	In-room Talk		
13	Mr.	Federico Di Vruono	United Kingdom	In-person	IAU	FM 2	2319	Radio astronomy and the quest for Quiet Skies	Contributed Talk	In-room Talk		
14	Prof.	James Lowenthal	United States of America	In-person	X	FM 2	2300	Overview of Artificial Light at Night and D&QS2 recommendations	Invited Talk	In-room Talk		
15	Dr.	Siegfried Eggl	United States of America	In-person	IAU	FM 2	2227	SatHub - A Community Driven Observation Portal of the new IAU Centre for the Protection of the Dark and Quiet Sky from Satellite Constellation Interference	Invited Talk	In-room Talk	Dr. Dr. Dr. Dr.	Meredith Rawls Samantha Lawler Constance E. Walker Piero Benvenuti Federico di Vuro
16	Dr.	Hector Linares Arroyo	Canada	In-person	IAU	FM 2	2196	Modeling to Mitigate the Impact of ALAN	Invited Talk	Remote Talk		

17	Dr.	Jeremy Tregloan-Reed	Chile	In-person	X	FM 2	2174	Optical and NIR magnitude measurements of low Earth orbit satellites, from a global observing network	Invited Talk	Remote Talk	Mr. Jorge Anais Mr. Anh Duong-Tuan Ms. Lizxandra Flores-Rivera Dr. Pablo García Mr. Rodrigo González Mr. Maximilian Häberle Dr. Boris Haeussler Dr. Tobias Hinse Dr. Edo Ibar Dr. Uffe G. Jørgensen Dr. Kim Yonggi Dr. Kim Haeun Miss Valeska Molina Dr. Theodoros Nakos Mr. Edgar Ortiz Dr. Ángel Otarola Miss María Romero-Colmenares Dr. Pedro Sanhueza Dr. Jesper Skottfelt Dr. Mario Soto Dr. Eduardo Unda-Sanzana Dr. Joh-Na Yoon
18	Dr.	Ramotholo Sefako	South Africa	In-person	IAU	FM 2	2159	SAAO Site Protection against Light and Dust Pollution	Contributed Talk	In-room Talk	
19	Dr.	Andrea Sosa	Uruguay	Virtual	X	FM 2	2064	An International Dark Sky Place in Uruguay: the first steps	e-Poster		
20	Prof.	Abd El Fady Morcos	Egypt	In-person	IAU	FM 2	2029	Monitoring Light pollution at Kottamia Astronomical Observatory	Contributed Talk	In-room Talk	Mr. Mohamed Aboushelib
21	Ms.	Carol Wilson	Australia	In-person	X	FM 2	1991	Characteristics of Radio Quiet Zones	Contributed Talk	Remote Talk	Dr. Gayathri Kongara
22	Prof.	Karen Masters	United States of America	In-person	IAU	FM 2	1653	Update on Activities of The US National Academies' Committee on Radio Frequencies (CORF).	Contributed Talk	In-room Talk	
23	Prof.	Sally Oey	United States of America	Virtual	X	FM 2	1651	How to Pass a Lighting Ordinance	e-Poster		
24	Dr.	Olivier Hainaut	Germany	In-person	X	FM 2	1601	Quantifying the effect of satellite constellations on optical observations	Contributed Talk	In-room Talk	Dr. Cees Bassa Dr. David Galadí-Enriquez
25	Prof.	Ana Ulla-Miguel	Spain	In-person	X	FM 2	1558	The Gai4Sustainability project: assessing light pollution aided by natural night sky brightness modelling	Contributed Talk	In-room Talk	Prof. Eduard Masana Dr. Josep Manel Carrasco Prof. Salvador Bará Dr. Salvador J. Ribas Prof. Carlos Dafonte Prof. Minia Manteiga Dr. Arturo Silveo
26	Mr.	Alemiye Mamo Yacob	Ethiopia	In-person	X	FM 2	1523	Astronomical site protection in Ethiopia	Contributed Talk	In-room Talk	
27	Dr.	Gyula I. G. Józsa	Germany	In-person	X	FM 2	1493	The Opticon-Radionet effort towards the protection of the dark and quiet skies	Contributed Talk	In-room Talk	
28	Mr.	Exodus Chun-Long Sit	Hong Kong	Virtual	X	FM 2	1412	Dark Sky without Borders: Besides Astronomers, How to Interact and Build Consensus with Stakeholders from Other Disciplines?	e-Talk		
29	Ms.	Yana Yakushina	Belgium	In-person	X	FM 2	1401	Legal protection of dark skies above major observatories	Invited Talk	Remote Talk	
30	Prof.	Divya Oberoi	India	In-person	X	FM 2	1352	Managing Radio Frequency Interference at the Giant Metrewave Radio Telescope	Contributed Talk	In-room Talk	Mr. Pravin Raybole Mr. Ankur Prajapati Mr. Sanjeet Kumar Rai Mr. Sureshkumar S. Dr. Shriharsh Tendulkar Dr. J. K. Solanki Prof. Yashwant Gupta
31	Dr.	Angel Otarola	Chile	In-person	X	FM 2	1343	Observations, analysis and characterization of satellites in Low Earth Orbit mega-constellations	Contributed Talk	In-room Talk	Dr. Jeremy Tregloan-Reed Dr. Eduardo Unda-Sanzana Dr. Przemek Mroz Dr. Thomas A. Prince Dr. Artem Burdanov Dr. Boris Haeussler Dr. Sebastián Zúñiga-Fernández
32	Dr.	Svitlana Kolomyets	Ukraine	In-person	IAU	FM 2	1264	On the space debris component in meteoroid models	Contributed Talk	In-room Talk	Dr. Serhii Kundyukov Ms. Iryna Kyrychenko

33	Prof.	Hidehiko Agata	Japan	In-person	X	FM 2	1200	The status of light pollution in Japan and its relation to astro-tourism	Contributed Talk	In-room Talk		
34	Prof.	John Hearnshaw	New Zealand	In-person	X	FM 2	1141	Light pollution: a unified global solution is needed for a global environmental problem	Contributed Talk	In-room Talk		
35	Dr.	Richard Waincoat	United States of America	In-person	X	FM 2	1075	Protection of the dark night sky over Hawaii's observatories	Contributed Talk	Remote Talk		
36	Dr.	Jonathan McDowell	United States of America	In-person	X	FM 2	1070	Software needs to mitigate the satellite constellation challenge	Contributed Talk	Remote Talk		
37	Dr.	Przemek Mroz	Poland	In-person	X	FM 2	975	Impact of LEO Megaconstellations on the Zwicky Transient Facility Survey Observations	Contributed Talk	In-room Talk		
38	Prof.	Zouhair Benkhaldoun	Morocco	In-person	IAU	FM 2	937	Site Protection in Morocco: Modelling the light pollution	Contributed Talk	In-room Talk	Mr.	Hamza Ait Abdelali
39	Prof.	Sarah Brough	Australia	In-person	IAU	FM 2	909	Impact of diffuse artificial light for different kinds of observations: optical wide field surveys	Invited Talk	Remote Talk		
40	Dr.	Constance Walker	United States of America	In-person	X	FM 2	895	Overview of the Impacts from & Mitigations of Satellite Constellations on Optical Astronomy	Contributed Talk	In-room Talk	The	D&QS1&2 & SATCON1&2 Working Group Chairs & Members
41	Dr.	Fatoumata Kebe	France	In-person	X	FM 2	859	Educating and empowering astronomers with SatHub	Contributed Talk	In-room Talk	Dr. Dr. Dr. Mr. Dr. Dr. Dr. Dr. Dr. Dr. Mr. Dr. Dr. Dr. Mr.	Vayujeet Gokhale Meredith Rawls Jeremy Tregloan-Reed Federico Di Vruno Sandor Kruk Stella Kafka Darcy Barron Mike Peel Elena Cirkovic Samantha Lawler Olga Zamora Doug Knox Matthew Goodman Harry Krantz Ian Birdwell Tim Deck
42	Dr.	Richard Green	United States of America	In-person	X	FM 2	832	National Policy and Regulations	Invited Talk	Remote Talk		
43	Dr.	Olga Zamora	Spain	In-person	X	FM 2	714	The brightness and colors of Oneweb satellites	Invited Talk	Remote Talk		
44	Dr.	Haiyan Zhang	China	In-person	X	FM 2	700	Recent Progress on Proposed National Standard of Electromagnetic Environmental Protection for Radio Telescopes	Contributed Talk	Remote Talk	Dr.	Xiang Zhang
45	Prof.	Piero Benvenuti	Italy	In-person	X	FM 2	690	The IAU Centre for the Protection of Dark and Quiet Sky from Satellite Constellations Interference (IAU CPS)	Invited Talk	In-room Talk	Dr. Eng.	Connie Walker Federico Di Vruno
46	Mr.	JAVIER DIAZ_CASTRO	Spain	In-person	IAU	FM 2	683	The OTPC (Technical Office for the Protection of the quality of the Sky) of the IAC. Experience on Sky Law regulation	Contributed Talk	Remote Talk		
47	Dr.	Salvador J. Ribas	Spain	In-person	IAU	FM 2	602	Measurement for Regional Monitoring	Invited Talk	Remote Talk		
48	Dr.	Priya Shah	India	In-person	X	FM 2	529	Dark Skies and Bright Satellites	Invited Talk	In-room Talk		
49	Mr.	Vladimir Pashk	Russia	virtual	x	FM 2	2947	Active Shutter as a New Universal Tool to Protect Astronomical Observations in the Optical Range from the Effects of Outdoor Lighting Systems and Bright LEO-Satellites	e-Poster			