

FM 21: Mitigating Threats of Light Pollution & Radio Frequency Interference

Room 316B, Hawaii Convention Center

Tuesday, 11 August 2015

FM21.1: Observations, Advances in LED Technology, and Dark Sky Protection,

10:30 am - 12:30 pm

10:30 am - 10:35 am	<i>FM Session Introduction</i>		FM21.1.01
10:35 am - 10:55 am	Richard Wainscoat	The search for Near Earth Objects - why dark skies are critically important	FM21.1.02
10:55 am - 11:15 am	Robert Adams	LEDs/ALAN—Working To Be Good Neighbors	FM21.1.03
11:15 am - 11:35 am	Richard Wainscoat	Light Emitting Diodes and Astronomy - a chance for restoration of the dark night sky - or for further loss	FM21.1.04
11:35 am - 11:55 am	Christian Karl Monrad	Advanced Strategies for Outdoor LED Lighting Applications and Technologies to Curtail Regional Light Pollution Effects	FM21.1.05
11:55 am - 12:15 pm	Fabio Falchi	The new World Atlas of Artificial Sky Brightness	FM21.1.06
12:15 pm - 12:30 pm	Alejandro Sánchez de Miguel	ISS images for Observatory protection	FM21.1.07

FM21.2: Measurement of Light at Night, 2:00 pm - 3:30 pm

2:00 pm - 2:15 pm	Dan M Duriscoe	Derivation of sky quality indicators from photometrically calibrated all-sky image mosaics	FM21.2.01
2:15 pm - 2:30 pm	Tomasz Mrozek	Night sky photometry with amateur-grade digital cameras	FM21.2.02
2:30 pm - 2:45 pm	Martin Aubé	Evaluation of the night sky quality at El Leoncito and LEO++ in Argentina	FM21.2.03
2:45 pm - 3:00 pm	Sze Leung Cheung	Globe at Night - Sky Brightness Monitoring Network	FM21.2.04
3:00 pm - 3:15 pm	Pedro Russo	Dark Sky Meter - IYL2015 app	FM21.2.05
3:15 pm - 3:30 pm	Eric Richard Craine	<i>in situ</i> Measures of LED Installations: Results of Air and Ground Surveys	FM21.2.06

FM21.3: Radio and Optical Site Protection, 4:00 pm - 6:00 pm

4:00 pm - 4:15 pm	Harvey Steven Liszt	Spectrum protection for radio astronomy: details, successes, failures, challenges and convergence	FM21.3.01
4:15 pm - 4:30 pm	Lisa Harvey-Smith	Radio Quiet Protection at the Australian Square Kilometre array site	FM21.3.02
4:30 pm - 4:45 pm	Adrian John Tiplady	On the Development of Radio Astronomy and Protected Astronomy Reserves in South Africa	FM21.3.03
4:45 pm - 5:00 pm	Haiyan Zhang	RFI Mitigation for FAST	FM21.3.04
5:00 pm - 5:15 pm	Yongheng Zhao	Light pollution and site protecting of the Xinglong Station, NAOC	FM21.3.05
5:15 pm - 5:30 pm	Yongqiang Yao	Site Protection Program and Progress Report of Ali Observatory, Tibet	FM21.3.06
5:30 pm - 5:45 pm	Ronald LeRoy Thiel	County of Hawaii - A Unique LED Street Light Conversion	FM21.3.07
5:45 pm - 6:00 pm	Sergio Ortolani	Checking the light pollution sources at Asiago Astrophysical Observatory from photometric and spectroscopic observations. Results from a unique experiment	FM21.3.08

Wednesday, 12 August 2015

FM2.4: Joint FM 2 & FM 21: World Heritage and the Protection of Working Observatory Sites, 10:30 am - 12:30 pm

10:30 am - 10:45 am	Malcolm G. Smith	The AURA Observatory in Chile – part of the IAU/UNESCO Extended Case Study.	FM2.4.01
10:45 am - 11:00 am	Gabriel Rodriguez	How government can support protection of “dark skies” as a public policy: the experience of Chile	FM2.4.02
11:00 am - 11:15 am	R. Chris Smith	Site Protection Efforts at the AURA Observatory in Chile	FM2.4.03
11:15 am - 11:30 am	Pedro Sanhueza	Highlights of the new Emission Norm for the Regulation of Light Pollution in Northern Chile	FM2.4.04
11:30 am - 11:45 am	Michel Cotte	Toward a Serial International Approach of the High Mountain Observatories, within important Dark Sky Value	FM2.4.05
11:45 am - 12:00 pm	Richard Wainscoat	Protection of Hawaii’s observatories from light pollution and radio frequency interference	FM2.4.06
12:00 pm - 12:15 pm	Richard F. Green	A Tale of Two Regions: Site Protection Experience and Updated Regulations in Arizona and the Canary Islands	FM2.4.07
12:15 pm - 12:30 pm	Ramotholo Sefako	Protection of SAAO observing site against light and dust pollution	FM2.4.08

FM21.5: Light at Night and Protected Areas, 2:00 pm - 3:30 pm

2:00 pm - 2:15 pm	Colin Henshaw	The Ecological Implications of Light at Night (LAN)	FM21.5.01
2:15 pm - 2:30 pm	Eric Richard Craine	Ecological Impact of LAN: San Pedro Riparian National Conservation Area	FM21.5.02
2:30 pm - 2:45 pm	Valentin Grigore	Stars For Citizens With Urban Star Parks and Lighting Specialists	FM21.5.03
2:45 pm - 3:00 pm	Xiaohua Wang	The New Progress of the Starry Sky Project of China	FM21.5.04
3:00 pm - 3:15 pm	Baozhou ZHANG	Measuring light pollution in Beijing and effects on Xinglong Station of National Astronomical Observatory	FM21.5.05
3:15 pm - 3:30 pm	Christopher James Baddiley	Light pollution modelling the UK Highways Agency new environmental policy, inc. astronomical impact of blue-rich LED luminaires.	FM21.5.06

FM2.6: Joint FM 2 & FM 21: Preserving Dark Skies and Protecting Against Light Pollution in a World Heritage Framework, 4:00 pm - 6:00 pm

4:00 pm - 4:20 pm	Babak Tafreshi	Nightscape Photography Reclaims the Natural Sky	FM2.6.01
4:20 pm - 4:40 pm	Michel Cotte	How to apply UNESCO World Heritage Criteria to the “Windows to the Universe” Sites?	FM2.6.02
4:40 pm - 5:00 pm	John Hearnshaw	The Aoraki Mackenzie International Dark Sky Reserve and light pollution issues in New Zealand	FM2.6.03
5:00 pm - 5:20 pm	Dan M Duriscoe	Night Sky preservation and restoration in U.S. National Parks	FM2.6.04
5:20 pm - 5:40 pm	Cipriano Marin	Developing Starlight connections with UNESCO sites through the Biosphere Smart	FM2.6.05
5:40 pm - 6:00 pm	Arkadiusz Berlicki	Dark Sky Protection and Education - Izera Dark Sky Park	FM2.6.07

Thursday, 13 August 2015

FM21.7: Education Programs Promoting Light Pollution Awareness and IYL2015,

8:30 am - 10:00 am

8:30 am - 8:45 am	Beatriz García	Network for Light Pollution education at secondary level	FM21.7.01
8:45 am - 9:00 am	Joanna Cecylia Molenda-Zakowicz	Astronomy Education Under Dark Skies	FM21.7.02
9:00 am - 9:15 am	Rosa Doran	Dark Skies Rangers	FM21.7.03
9:15 am - 9:30 am	Lucia Marchetti	The International year of light 2015 and the "Cosmic light" message: awareness & dissemination in the UK	FM21.7.04
9:30 am - 9:45 am	Rosa Doran	Cosmic Light EDU kit	FM21.7.05
9:45 am - 10:00 am	Constance Elaine Walker	The Quality Lighting Teaching Kit: Educating the Public about the Dark Side of IYL2015	FM21.7.06

FM21.8: Challenges and Solutions to Light Pollution, RFI and Implementing IAU Resolution 2009

B5, 10:30 am - 12:30 pm

10:30 am - 10:45 am	Diane Turnshek	Our Pittsburgh Constellation	FM21.8.01
10:45 am - 11:00 am	Constance Elaine Walker	Globe at Night: From IYA2009 to the International Year of Light 2015 and Beyond	FM21.8.02
11:00 am - 11:02 am	<i>Panel Introduction</i>		
11:02 am - 11:09 am	Colin Henshaw	The Social Implications of Light at Night	FM21.8.03
11:09 am - 11:16 am	Elizabeth M. Griffin	Re-interpreting R, R and R	FM21.8.04
11:16 am - 11:23 am	Audrey Ann Fischer	Citizen Engagement for Starlight~ Taking it to a higher level	FM21.8.05
11:23 am - 11:45 am	<i>Discussion</i>		
11:45 am - 12:00 pm	Richard F. Green	Implementation of IAU Resolution 2009 B5, "in Defence of the night sky and the right to starlight"	FM21.8.06
12:00 pm - 12:30 pm	<i>Discussion</i>		