

Program

Friday, June 7th, 2019

9:00	10:00	Registration and Welcome Coffee	
10:00	10:20	Chair: Céline d'Orgeville	Welcome remarks and Sponsors Acknowledgments
10:20	10:40	Session 1: LGS & WFS Principles Chair: Felipe Pedreros	INVITED - R. Johnson , A brief introduction to sodium layer physics
10:40	11:00		INVITED - H. Yang , PPPP and other LGS WFS techniques
11:00	11:20	Session 2: Facilities & Operations Chair: Pascale Hibon Sponsored by TMT	L. Catala , Toptica laser commissioning at Gemini North
11:20	11:40		J. L. Alvarez , Multiple Laser Guide Star; performance, operation and maintainability at Paranal Observatory
11:40	12:00		E. Mieda , LGS activity at Subaru Telescope
12:00	12:20		G. Rahmer , LGS Operations at the Large Binocular Telescope Observatory
12:20	12:30		Discussion/questions
12:30	13:30	Lunch	
13:30	14:10	Coordinators: Denis Brousseau and Guillaume Allain	Tour U. Laval Laser and Photonics labs
14:10	14:20	Session 3: Research & Development Chair: Noelia Martínez Sponsored by ESO	INVITED - D. Bonaccini Calia , An overview on ESO activities in Laser Systems R&D
14:20	14:40		D. Bonaccini Calia/MPB , Scaling the 589nm power obtained with fiber amplifiers to 50W+ CW LGS lasers
14:40	14:55		F. Pedreros Bustos , Predicting return flux enhancement with chirped CW laser guide stars
14:55	15:10		D. Bonaccini Calia/Toptica , First results on on-sky laser Chirping to enhance LGS brightness
15:10	15:20		F. Pedreros Bustos , Mesospheric magnetometry experiments in La Palma
15:20	15:50		Discussion/questions
15:50	16:10	Coffee Break	
16:10	16:30	Session 4: SSA & Laser Comms Chair: Etsuko Mieda Sponsored by TNO	C. d'Orgeville , First Laser Guide Star for Space Debris Tracking, Imaging and Manoeuvring in Australia
16:30	16:50		S. Kuiper , AO pre-correction in Laser communication and GLAO based on TNO's electromagnetic DM technology
16:50	17:10		N. Martínez , Adaptive Optics for LGS uplink correction: on-sky validation
17:10	17:30		Discussion/questions
19:00		Workshop Dinner	

13th Annual Workshop on
Laser Technology and Systems for Adaptive Optics
 L4AO-13

Program

Saturday, June 8th, 2019

9:00	9:10	Session 5: Semiconductor Laser Technologies Chair: Robert Johnson Sponsored by ANU	INVITED - M. O. Byrd , Demonstration of VECSELS as viable alternatives for 589 nm sodium beacons
9:10	9:30		J-P. Penttinen , Progress in VECSEL technology for laser guide stars
9:30	9:50		M. Hart , Stable Narrow-line VECSEL Operation for Sodium Guide Star Generation
9:50	10:10		K. Wyman , Development of Semiconductor Disk Lasers for Sodium Guidestar Applications
10:10	10:30		G. Fetzer , Semiconductor Guide Star Laser
10:30	11:00		Discussion/questions
11:00	11:20	Coffee Break	
11:20	11:40	Session 6: LGS Facility Optics Chair: Laure Catala Sponsored by GMT	A. Otarola , LLT optics aberrations and their effect on the Laser Guide Star spot size and excess wavefront error
11:40	12:00		M. van Riel , Laser Launch Tube for LGS systems
12:00	12:20		E. Marin , A new Laser Guide Star Facility for Gemini North
12:20	12:40		Discussion/questions
12:40	13:40	Lunch	
13:40	14:00	Session 7: Laser Avoidance Chair: Gustavo Rahmer Sponsored by LBTO	P. Duhoux , Extension of the Laser Traffic Control Software for future collision predictions
14:00	14:20		T. Murphy , TBAD: Protecting Against Accidental Illumination of Aircraft
14:20	14:40		J. Dewsnap , Strategies for Satellite Safety with Adaptive Optics Lasers
14:40	15:10		Discussion/questions
15:10	16:30	Session 8: Poster Session & Coffee Chair: Ronald Holzlöhner	Poster Session & Coffee
16:30	17:00	Workshop Summary Chair: Angel Otarola	Workshop Summary and plans for next workshop