



2019 SOARD Program Review

March 19-20, 2018 | Santiago, Chile

DoubleTree by Hilton Santiago-Vitacura
Av. Vitacura 2727, Las Condes, Santiago, CHILE

Day 0 - Monday 18 March

Possible activities to include Embassy meetings, early check-in, drinks social

Day 1 - Tuesday 19 March

Time	Topic	Speaker
0800	Registration	
0830	Welcome, Opening Remarks and Safety Briefing	Monte, SOARD
0850	The Southern Office of Aerospace Research and Development	Andersen, SOARD
0920	Interactions Between Cold Rydberg Atoms	Marcassa, U Sao Paulo, BRA
0940	Two-photon Spectroscopy in Organic Materials and Polymers	Mendonca, U Sao Paulo, BRA
1000	BREAK	
1030	Recent Progress in the Exploitation of Two-photon Sources: Metrology and Orbital Angular Momentum Correlations	U'Ren, UNAM, MEX
1050	Optical and Magnetic Properties of Quantum Emitters in Diamond	Maze, PUC Santiago, CHL
1110	2-photon Entangled Spectroscopy	Nunez, U de los Andes, COL
1130	Superconductors	Kopelevich, UNICAMP, BRA
1150	Event-based Imaging	Cohen, Western Sydney U, AUS
1210	EBS Testing	Hawks, AFIT, USA
1230-1400	LUNCH	
1400	Spin-torque Nano-oscillators for Signal Processing and Storing	Hevia, U d Chile, CHL
1420		Kiwi? Maze?
1440	Exploring the Molecular Engineering of the Nervous System to Sense Temperature Responses: Novel Neuromorphic Strategies	Gonzalez / Urzua, U Andres Bello, CHL

1500	Dual Topology Adaptive Neural Network Mimicking the Visual System of Mammals	Perez-Acle, Cienciavida, CHL
1520	Retina-based Visual Module for Navigation in Complex Environments	Escobar, U Tech Fed Santa Maria, CHL
1540	Emotion and Trust Detection from Speech	Ferrer, U Buenos Aires, ARG
1600	BREAK	
1620	RF Generation Using Nonlinear Transmission lines	Rossi, INPE, BRA
1640	Multi-Scale Dynamic Failure Modeling of Heterogeneous Materials	Sollero, UNICAMP, BRA
1700	Biocorrosion and Extremophiles	Blamey, Fundacion Biocencia, CHL
1720	Biocorrosion	Vejar, APA / CIDCA, CHL
1740	MEETING ADJOURN	
1830	Drinks	DoubleTree Bar



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Day 2 - Wednesday 20 March

Time	Topic	Speaker
0800	Registration	
0820	Opening Remarks	Montes, SOARD
0840	Expanding the FALCON Telescope Network into the Data Science Era: Our Present Work and Future Perspective	Nilo, U la Serena, CHL
0920	Spectroscopic Identification and Characterization of Resident Space Objects	Englehart, AFRL / RV, USA
0940	Acoustic Monitoring of Geosynchronous Satellites	Hart, U Arizona, USA
1000	BREAK	
1030	Rotationally-shearing Interferometer: Preliminary Results with a Simulated Solar System	Strojnink, CIO, MEX
1050	Southern Skies	Solis, APA / CIDCA, CHL
1110	Suchai Satellite	Diaz, U de Chile, CHL
1130	Variation of Plasma Pressure in the Magnetosphere during Geomagnetic Storms	Stepanova, U de Santiago, CHL
1210	Statistics of Ion Density Irregularities and Their Gradients Within Structured Low-Latitude Ionospheric Plasma Bubbles Based on C/NOFS Planar Langmuir Probe Data	Costa, PUC-Rio, BRA
1230-1400	LUNCH	
1400	RDECOM and ONRG Opportunities in S. America	Szmigel / Jeffries / Diogenies, US Army, US Navy
1420	3D Elliptical Equations	Rubio, USAM

1440	Birth Modelling and Filtering of Space Objects for Space Situational Awareness using Random Finite Sets (RFSs)	Moratuwage / Adams, U de Chile, CHL
1500	Advanced Computing Techniques for the Detection and Identification of Transient Sources	Nilo, U la Serena, CHL
1520	Building Data Lakes and Analytics on AWS	Coquero, Amazon Web Services, USA/CAN
1540	Chilean Virtual Observatory: Tools and cloud services	Solar, U Tech Fed Santa Maria, CHL
1600	BREAK	
1620	Multilayer Thermostructural Coatings for Advanced Aerospace Propulsion Systems	Sampath, Stonybrook U, NY
1640	Modelling the Thermomechanical Response of Multi-material Multi-layered Multi-functional Ceramic-metal Coating Architectures	Trapaga / Poblano, CIATEQ, MEX
1700	Thin-Film based Large Area Neutron Detection Using Oxides, II-VI and Perovskite Materials	Quevedo, U Texas Dallas, USA
1720	Mexican Initiative	Aguille, CIMAV, MEX
1740	Microstructures in Thermoplastics	Idiart, U Int. de Las Platas, ARG
1800	MEETING ADJOURN	
1930	Social Dinner	Av. Luis Thayer Ojeda 019, Providencia