Outstanding Paper Award for Young Scientists 2020

43rd COSPAR Scientific Assembly
Sydney, Australia, 28 January – 4 February 2021

COSPAR Scientific Commission A	**Wenyan Ge (China)** *Lithological discrimination using ASTER and Sentinel-2A in the Shibanjing ophiolite complex of Beishan orogenic in Inner Mongolia, China* *ASR* 62/7
	Pawel Hordyniec (Poland) *Simulation of liquid water and ice contributions to bending angle profiles in the radio occultation technique* *ASR* 62/5
	Merlin Christopher Köhnke (Germany) *Observation of a 27-day solar signature in noctilucent cloud altitude* *ASR* 61/10
	Günther March (The Netherlands) *High-fidelity geometry models for improving the consistency of CHAMP, GRACE, GOCE and Swarm thermospheric density data sets* *ASR* 63/1
	Matthias Raynal (France) *From conventional to Delay Doppler altimetry: A demonstration of continuity and improvements with the Cryosat-2 mission* *ASR* 62/6
	Xiaolei Wang (China) *Azimuth selection for sea level measurements using geodetic GPS receivers* *ASR* 61/6
COSPAR Scientific Commission B	**Danielle M. DeLatte (USA)** *Automated crater detection algorithms from a machine learning perspective in the convolutional neural network era* *ASR* 64/8
	Yongchao Zhu (China) *Analysis of the brightness temperature features of the lunar surface using 37 GHz channel data from the Chang'E-2 microwave radiometer* *ASR* 63/1

COSPAR Scientific Commission C	**Ronny Badeke (Germany)** *Empirical forecast of quiet time ionospheric Total Electron Content maps over Europe* *ASR* 61/12
	Stefan Gohl (Czech Republic) *Study of the radiation fields in LEO with the Space Application of Timepix Radiation Monitor (SATRAM)* *ASR* 63/5
	Günther March (The Netherlands) *CHAMP and GOCE thermospheric wind characterization with improved gas-surface interactions modelling* *ASR* 64/6
	Tim Visser (The Netherlands) *Horizontal and vertical thermospheric cross-wind from GOCE linear and angular accelerations* *ASR* 63/10
	Ningbo Wang (China) *Refinement of global ionospheric coefficients for GNSS applications: Methodology and results* *ASR* 63/1
COSPAR Scientific Commission D	**Jordan Lasuik (Canada)** *The influence of non-Gaussian distribution functions on the time-dependent perpendicular transport of energetic particles* *ASR* 61/11
	Katlego Daniel Moloto (South Africa) *Numerical integration of stochastic differential equations: A parallel cosmic ray modulation implementation on Africa's fastest computer* *ASR* 63/1
COSPAR Scientific Commission E	**Weiwei Xu (China)** *Distinctive properties of cosmic-ray positron and electron fluxes measured by AMS on ISS* *ASR* 64/12
COSPAR Scientific Commission F	**Frederico Kiffer (USA)** *Late effects of ^{1}H irradiation on hippocampal physiology* *LSSR* 17
	Krishna Luitel (USA) *Proton radiation-induced cancer progression* *LSSR 19*

COSPAR Scientific Commission G	**Giuseppe Prete (Italy)** *Influence of the transport regime on the energetic particle density profiles upstream and downstream of interplanetary shocks* *ASR* 63/8
Panel on Potentially Environmentally Detrimental Activities in Space (PEDAS)	**Aleix Pinardell (The Netherlands)** *Ariane 5 GTO debris mitigation using natural perturbations* *ASR* 63/7
	François Sanson (The Netherlands) *Noise estimation and probability of detection in non-resolved images: Application to space object observation* *ASR* 64/7
Panel on Technical Problems Related to Scientific Ballooning (PSB)	**Kanika Garg (Sweden)** *Balloon ascent prediction: Comparative study of analytical, fuzzy and regression models* *ASR 64/1*
Technical Panel on Satellite Dynamics (PSD)	**Hongru Chen (France)** *Lunar far side positioning enabled by a CubeSat system deployed in an Earth-Moon halo orbit* *ASR* 64/1
	Liang Fan (China) *Dynamic modeling and modal parameters identi-fication of satellite with large-scale membrane antenna* *ASR* 63/12
	Eva Jalabert (France) *Analysis of South Atlantic Anomaly perturbations on Sentinel-3A Ultra Stable Oscillator. Impact on DORIS phase measurement and DORIS station positioning* *ASR* 62/1
	Chuang Liu (China) *Robust fault tolerant nonfragile H∞ attitude control for spacecraft via stochastically intermediate observer* *ASR* 62/9
	Liu Xin (China) *A fast satellite selection algorithm with floating high cut-off elevation angle based on ADOP for instant-aneous multi-GNSS single-frequency relative positioning* *ASR* 63/3
	Tommaso Pino (Italy) *Wrinkling analysis for small solar-photon sails: An experimental and analytic approach for trajectory design* *ASR* 63/11

	Aaron Jay Rosengren (USA) *Dynamical cartography of Earth satellite orbits* *ASR* 63/1
	Crislaine Menezes da Silva (Brazil) *Ionospheric scintillation impact on ambiguity resolution using ADOP in closed form* *ASR* 64/4
	Kui Zeng (China) *Two-phase shaping approach to low-thrust trajectories design between coplanar orbits* *ASR* 62/3
	Rui Zhang (China) *Impact of BDS-3 experimental satellites to BDS-2: Service area, precise products, precise positioning* *ASR* 62/4