

Advances in Space Research: Top Reviewers of 2020

Advances in Space Research (ASR), as with any established scientific journal, insists on a rigorous peer-review process to maintain the integrity and quality of its published papers. An essential part of this process is the reviewer, spending his or her valuable time using unique expertise to evaluate the scientific quality of a manuscript and help the Editor make a fair and timely decision.

To further highlight the vital importance of reviewers to the quality *ASR* publications, the Editors have selected their 10 top reviewers for the year 2020, taking into account criteria such as the number and the quality of the referee reports performed during this year. By publishing the names and short biographies of these selected reviewers in this issue of *Space Research Today*, we would like to acknowledge their valuable efforts. As an additional token of appreciation, these reviewers were offered an Amazon voucher by Elsevier. Their names will also be acknowledged on the journal homepage of *ASR* (<https://www.journals.elsevier.com/advances-in-space-research/reviewers/thank-you-reviewers-aisr>).

We also feel deeply obliged to all *ASR* reviewers who have contributed this past year who are not mentioned here, and we sincerely thank all of them for bringing the journal up to its current scientific standard.

Pascal Willis, *ASR* Editor-in-Chief
Lianne van der Zant, *ASR* Publisher (Elsevier)

Jean-Pierre Barriot



Jean-Pierre Barriot is currently Distinguished Professor of geophysics and Head of the Geodesy Observatory of Tahiti (OGT), a joint structure maintained by the French Space Agency (CNES), NASA, and the University of French Polynesia. OGT is a key observing node of the Int. Terrestrial Reference Frame (ITRF) network. Jean-Pierre Barriot, after a PhD in Theoretical Physics from the University of Montpellier (1987), started his career as an engineer at the space geodesy department of CNES (1987-2006), then switched to a full professorship in geophysics at the University of French Polynesia, after defending a Habilitation thesis in Astronomy in 1997. He was also Research Associate at the Jet Propulsion laboratory from 1991 to 1992 and managed two services of the International Association of Geodesy (Int. Gravimetric Bureau and Int. Center for Earth Tides). He was involved in several radiosciences teams in deep space missions (Mars Express, Rosetta, NEAR) and continues to work in this topic (Bepi-Colombo, Lucy), as well as in GPS meteorology. He is also Long-Term Invited Professor in radiosciences at the University of Wuhan.

Juan Blanch



Juan Blanch is a senior research engineer at Stanford University, where he works on integrity algorithms for Space-based Augmentation Systems and on Receiver Autonomous Integrity Monitoring. A graduate of Ecole Polytechnique in France, he holds an MS in Electrical Engineering and a Ph.D. in Aeronautics and Astronautics from Stanford University. He received the 2004 Institute of Navigation (ION) Parkinson Award for his doctoral dissertation and the 2010 ION Early Achievement Award.

Matteo Ceriotti



Dr Matteo Ceriotti is a Lecturer in Space Systems Engineering at the James Watt School of Engineering, University of Glasgow (United Kingdom). His main research interests are space mission analysis and design, orbital dynamics, trajectory optimisation, particularly focusing on multi-body dynamics, high area-to-mass ratio spacecraft and asteroid missions.

He received an MSc *summa cum laude* from Politecnico Milano (Italy) with a thesis on planning and scheduling for planetary exploration, and a PhD on “Global Optimisation of Multiple Gravity Assist Trajectories” from the University of Glasgow. He was a Research Fellow at the Advanced Space Concepts Laboratory, University of Strathclyde, Glasgow, leading the research theme “Orbital Dynamics of Large Gossamer Spacecraft”.

As of 2020, he has published 57 journal articles, 6 chapters in edited books and his work was presented at more than one hundred conferences. He is an associate editor for the Transactions of Japan Society of Aeronautical and Space Sciences (TJSASS), a Chartered Engineer (IMechE) and a Fellow of the Higher Education Academy.

John Bosco Habarulema



John Bosco Habarulema graduated with a PhD in space physics from Rhodes University, South Africa in 2011. His research interests include understanding and modelling the temporal and spatial variations of ionospheric parameters such as electron density, vertical drifts and total electron content (TEC); low latitude ionospheric electrodynamics; ionospheric storm effects; and studies of Atmospheric Gravity Waves especially monitoring travelling ionospheric disturbances during geomagnetically disturbed conditions. He is currently a researcher within the Science Research and Applications Group of the South African National Space Agency (SANSA), Hermanus, South Africa. He is passionate about students' training and supervision in space physics.

Danil Ivanov



Dr. Danil Ivanov is Senior Researcher at the Keldysh Institute of Applied Mathematics of the Russian Academy of Science (KIAM), Associate Professor at the Theoretical Mechanics Chair of the Moscow Institute of Physics and Technology (MIPT). He received M.Sc. in Physics and Mathematics from MIPT in 2010 and PhD in Theoretical Mechanics from KIAM in 2013. Area of his professional interest comprises spaceflight dynamics, attitude motion, attitude determination, satellite formation flying control algorithms, computer and laboratory methods of simulation of attitude dynamics and formation flying motion. He was involved in development of ADCS for a set of successful small satellite missions: Chibis-M (2012), BEESAT-3 (2013), TabletSat-Aurora (2014), TNS-0 #2 (2017), SiriusSat-1&2 (2018). He is currently involved in oversees and national industrial and research projects related to satellite motion control systems development. He published more than 50 papers in peer-reviewed journals. He is a member of editorial board of the International Journal of Space Science and Engineering and guest editor of the Aerospace Journal. He is outstanding contributor in reviewing for Acta Astronautica Journal. He received Young Scientist Award of the Moscow

Government in 2015 and the Scholarship of Russian Federation President for outstanding young researchers for challenging scientific investigations (2012-2020).

Kazuoki Munakata



Kazuoki Munakata obtained Doctor of Science degree in physics from Nagoya University, Japan in 1986. He is now a professor emeritus of Shinshu University in Japan where he had been a faculty member since 1989 until his retirement in 2018. He has been studying the heliospheric modulation of galactic cosmic rays based on the ground-based and direct measurements of high energy galactic cosmic rays. His research interests include the space weather monitoring with the temporal variation of galactic cosmic ray intensity, the charge dependent modulation and the remote sensing of solar magnetic field with the shadow of Sun in TeV cosmic ray intensity and so on.

Pawel Wielgosz



Prof. Pawel Wielgosz is a Full Professor at the Faculty of Geoengineering of the University of Warmia and Mazury in Olsztyn (UWM), Poland, where he earned his Ph.D. in Geodesy in 2002. His research interests focus on satellite navigation, precise kinematic and static positioning, deformation monitoring, and also GNSS-based ionosphere and troposphere studies. His research achievements earned him the *Heiskanen Senior Award* in 2004.

Prof. Pawel Wielgosz is involved in various activities of major international scientific organizations as he is the Chair of the International Association of Geodesy (IAG) Sub-Commission 4.4 “*GNSS Integrity and Quality Control*” and a member of the Steering Committee of the IAG Commission 4 “*Positioning & Applications*”. He received IAG Honorary Fellowship in 2019. Since 2015 he has been a member of the Global Geodetic Observing System (GGOS) Science Panel, and since 2020 he has been a member of GNSS Science Advisory Committee (GSAC) with the European Space Agency (ESA). He is an associate editor of *Journal of Geodesy*

and a member of editorial boards of several scientific journals. Since 2016 he has been the Vice-chair of the Committee of Geodesy of the Polish Academy of Sciences. In 2020 he was appointed to the Polish National Committee for the International Union of Geodesy and Geophysics (IUGG).

Yury Yasyukevich



Yury V. Yasyukevich received his Ph.D. degree in radio physics from Institute of Solar-Terrestrial Physics of Siberian Branch of Russian Academy of Sciences (ISTP SB RAS) in 2009. He works at the ISTP SB RAS as a leading researcher and at Irkutsk state university as an associate professor. His scientific interests include GNSS-ionosphere, space weather impact on GNSS, absolute total electron content. He is a PI of SIMuRG project (<http://simurg.iszf.irk.ru>).

Kris Zacny

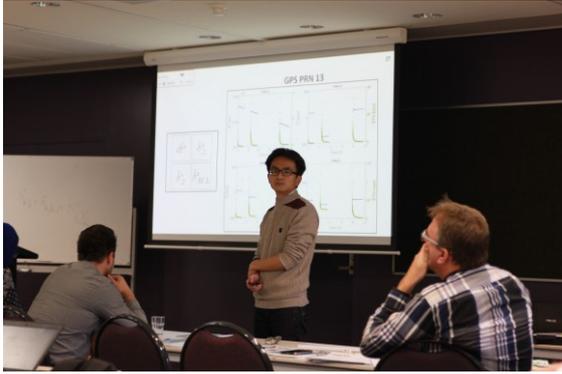


Dr. Kris Zacny is VP and Senior Research Scientist at Honeybee Robotics. His interests include space mining, sample handling, soil and rock mechanics, extraterrestrial drilling, and In Situ Resource Utilization (ISRU). He co-founded Exploration Technology Division (EX), based in Altadena, CA. EX, with over 100 employees, focuses on developing space mining robots.

In his previous capacity as an engineer in South African underground gold, diamond, and coal mines, Dr. Zacny managed numerous mining projects and production divisions. This hands-on experience related to drilling and mining became invaluable in developing such technologies for space. Dr. Zacny received his PhD (UC Berkeley, 2005) in Geotechnical Engineering with an emphasis on Extraterrestrial Drilling and Mining, ME (UC Berkeley, 2001) in Petroleum Engineering with emphasis on Drilling and Materials Science, and BSc cum laude (U. Cape Town, 1997) in Mechanical Engineering.

He participated in several Antarctic, Arctic, Atacama, and Greenland expeditions. Dr Zacny has approx. 200 publications, he has over 40 NASA New Technology Records and four NASA Group Achievement Awards.

Baocheng Zhang



Baocheng Zhang is a professor at the Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences (CAS). He obtained his B.Sc. and M.Sc. degrees with distinction in Geodesy and Engineering Surveying from Wuhan University, China in 2005 and 2007, respectively. Prof. Zhang afterwards received his Ph.D. degree from the CAS in 2012. From 2011 to 2016, Prof. Zhang was engaged in postdoctoral research at Curtin University, Australia under the supervision of Prof. Peter Teunissen. Since August of 2016, he has been a full professor in GNSS Geodesy at Innovation Academy for Precision Measurement Science and Technology. He has several recognitions from the community, including the ION GNSS Student Paper Award in 2009 and the Excellent Doctoral Thesis Award of the CAS in 2014. He is currently a member of the Inter-Commission Committee on Theory of the International Association of Geodesy. His research focuses on the modeling of multiple global navigation satellite systems for integer ambiguity resolution-enabled precise point positioning (PPP-RTK) applications.