SpaceTech Alumni Association – Symposium 2019

Start		Speaker	Organisation	Title
09:25				
09:30	INTRO	Franco Ongaro	D-TEC	Welcome to ESTEC
09:45		Otto Koudelka	TU Graz	Welcome by TU Graz
09:55		Josep Roselló	ESA Earth Observation	ESA Earth Observation (EO) Missions and technology
10:25	POLICY	Stefan van der Esch	PBL Netherlands Environmental Assessment Agency	Using earth observation data in policy development'
10:55		Tim Hayward	UK space agency/Caribou Space	Space Products in Developing Countries – the UKSA's International Partnership Programme
11:25		Dr. V (Niki) de Sy	Wageningen University	Innovative forest monitoring in support of climate change mitigation
11:55	break	break	break	break
12:05	TECH	Bastian Morawitz	Spacetech 2018	Exec Summary of CCP 2019
12:20		Jeroen Rotteveel	ISIS Space Delft	
12:50	Lunch	Lunch	Lunch	Lunch
14:00	TECH	Thorsten Fehr	ESA EARTH OBSERVATION	
14:30		Anton leemhuis	TNO	The impact of Space 4.0 on monitoring air pollution and greenhouse gas emissions
15:00		Wiley J. Larson	Space Technology Series @ Air Force Academy	Model-Based Systems Engineering
15:30	break	break	break	break
15:40	INNOVATION AND VENTURE	Fausto Vieira	ESA Business Applications	Sustainable services for the management of the environment, wildlife and natural resources
16:10		Lluc Diaz	Rhea on behalf of ESA	The impact of early stage investment in space start-ups.
16:40		Rohan Jaguste (Video link)	RJ+Design	
17:10	PANEL			
18:00	End of Day			
18:30				
19:00	TU GRAZ Hosted BBQ on Noordwijk Beach			

TU Graz

http://spacetech.tugraz.at/

Introduction to space 4.0	Space 4.0 represents the evolution of the space sector into a new era, characterised by a new playing field. This era is unfolding through interaction between governments, private sector, society and politics. Space 4.0 is analogous to, and is intertwined with, Industry 4.0, which is considered as the unfolding fourth industrial revolution of manufacturing and services. Space 4.0, implies that the Space Sector fully integrates into the fabric of a global society and economy. Space 4.0 is about providing services that lead to a sustainable managed environment.
Speaker	Biography
Franco Ongaro	Franco Ongaro is the Director of Technology, Engineering and Quality (D/TEC), and Head of ESTEC in Noordwijk, the Netherlands. Franco Ongaro graduated as a Doctor of Aeronautical Engineering from the University Politecnico of Milan. In 1987 he joined ESA, working at ESA HQ in Paris on the Columbus project. In 1988, he moved to ESTEC in the Netherlands as Head of the Columbus Payload Interfaces Unit. He was shortlisted as candidate in the European astronaut selection of 1991. In 1994, Franco Ongaro moved back to HQ, to join the ESA Strategy Directorate as General Studies Programme Manager. In 2001, he initiated and managed the start of the Aurora exploration programme until 2005, when he became head of the ESA Advanced Concepts and Technology Planning Department, issuing the first ESA Technology Long Term Plan and creating the Advanced Concepts Team. From 2007, he led the preparation and implementation of the Iris programme to develop a 'satcom' component for air traffic management. In 2009 he became Head of the Telecom Technologies, Products and Systems Department in the Telecommunications and Integrated Applications Directorate at ESTEC. From 1994 until 2009, he taught a one-semester graduate course in spacecraft design at the University Politecnico of Milan. On 1 April 2011, he became Director of Technical and Quality Management (D/TEC) at ESTEC in Noordwijk and, since 1 January 2017, Director of Technology, Engineering and Quality.
Otto Koudelka	Otto Koudelka studied Electrical Engineering at Graz University of Technology, Austria, received the Master's degree (Dipl.-Ing.) in electrical engineering (1980) and PhD degree (1986) with honors in communications from Graz University of Technology. From 1980 – 1982 he was scientist at the Research Centre Graz and became involved in ESA's first high-speed satellite data transmission experiment STELLA. In1982 he joined Graz University of Technology where he became Assistant Professor and Deputy Head of the Institute of Communications and Wave Propagation, Austria's leading institute in space communications. "Habilitation" was in 1993, afterwards Otto Koudelka became Associate Professor at TU Graz. In 1990 he was Visiting Researcher at the Rutherford-Apleton Laboratory in Oxford and University of Buckingham carrying out research in high-speed satellite networking systems. From 1999-2000 he was Visiting Professor at the University of Kansas (USA). In 2002 he became Full Professor in Communications at Graz University of Technology, succeeding Prof Willibald Riedler, the eminent Austrian Space scientist, as Head of the Institute of Communication Networks and Satellite Communications at Graz University of Technology (the institute was renamed in 2002 to institute of Communication Networks and Satellite Communications). From 2002 to 2012 he was also Head of the Institute of Applied Systems Technology (Joanneum Research, the second largest non-university research institution in Austria), respectively Head of the Space and Acoustics Research Group, responsible for a team of more than 40 researchers and engineers. His research and teaching activities are in the fields of satellite and terrestrial broadband wireless communications, development of space-qualified hard-and software, nanosatellite technology, satellite and terrestrial networking, multi-media communications as well as satellite ground station technology.

Josep Roselló	Mr. Josep Roselló graduated as a Telecommunications Engineer from UPC (Politechnical University of Catalonia) in Barcelona and also has since 1998 an MBA from the Rotterdam School of Management (RMS) University . Mr. Roselló started working in 1993 at ESTEC Technical Directorate in Signal and on-board data processing. He is currently the Head of the Technology Coordination & Frequency Management Section, where he works since 2007, in the Future Missions and Instruments Division (EOP-ΦM) of the Earth Observation Programme (EOP) Directorate, here at ESTEC. Josep has a large experience in technology developments specially in the areas of SAR and GNSS payloads for scientific applications, in data communications and in avionics. He also coordinates all types of Technology develops for EOP.
Stefan van der Esch	Policy researcher at PBL Netherlands Environmental Assessment Agency
Tim Hayward	Tim is a Senior Director at Caribou Space (part of Caribou Digital) focusing on the delivery and evaluation of space solutions in emerging market digital economies. Tim is currently leading Caribou's engagement with the UK Space Agency's IPP programme. Before Caribou, Tim worked as interim Managing Director and Operations Director for GSMA's Mobile for Development department which works with donors to implement mobile services in developing countries. Tim has many years of experience in managing and evaluating complex programmes across the Development, Space, Telecoms, Government and Defence sectors.
Dr. V (Niki) de Sy	Dr. de Sy is currently a postdoctoral researcher at Wageningen University, as part of CIFOR's global comparative study on REDD+ (Reducing Emissions from Deforestation and forest Degradation, plus enhancing forest carbon stocks in (sub)tropical non-annex 1 countries). Her research focuses on the role and options of national forest monitoring for REDD+, with particular emphasis on remote sensing technologies, national capacities & circumstances, and drivers of deforestation. She holds a master degree in International Land & Water Management from wageningen University, specialising in interdisciplinary research of land management and development issues, with a minor in remote sensing and geo-information science. Special interests are spatial analysis of land use change dynamics, natural resouce management, and the interaction between technology and the broader socio-economic context in developing countries.
Bastian Morawitz	He has just completed his Masters in Space System engineering at TU-Graz (yesterday) Currently he is a Systems and Payload Engineer under contract to the European Space Agency .
Jeroen Rotteveel	Jeroen Rotteveel is one of the founders of ISIS and is the current CEO of the company. In addition to his role as CEO, Jeroen has a number of other functions in the area of space engineering: • Chairman of SpaceNed, the branch organisation for space companies in the Netherlands (www.spacened.nl) • Board member of the Delfi Foundation, a non-profit organization that supports Dutch students to promote their study results, if those are related to hands-on satellite projects, in (inter)national conferences (www.delfifonds.nl) • Board member of Holland Space Cluster (www.hollandspacecluster.nl) • Board member of Lucht- en Ruimtevaart Nederland (www.luchtenruimtevaart.nl) • Board member and treasurer of AMSAT-NL, the satellite radio amateur organisation in the Netherlands (www.amsat-nl.org)
Thorsten Fehr	Head of Atmospheric Section - European Space Agency

Anton leemhuis	During his years at TNO Anton has worked in various technical and commercial roles in the oil & gas industry. He has been working closely together with national oil & gas companies (NOCs), international oil &gas companies (IOCs), service providers and venture capital funds to develop and implement new technology, with a specific focus on Europe and the Middle-East. Anton holds a special interest in Intelligent field technologies and production optimization. His particular focus is the development of new technical solutions and setting up pilot projects together with operators. He has been involved in some of TNO's key projects in the area like, for example, the development and implementation of a real-time surveillance system for off-shore gas production at Wintershall North Sea, development of IOR technologies for horizontal wells with Maersk Oil, and improving the water sweep efficiency of a mature KOC field. Anton has published technical papers on intelligent field technologies, has been part of several SPE committees with intelligent field focus including Giant Field Monitoring (Dubai) , Reservoir characterization (Qatar) and Production Optimization challenges (Kuwait). In addition he provides intelligent field training at universities.
Wiley J. Larson	Wiley Larson received his doctorate from Texas A & M University in Space Systems in 1988. He is an experienced leader and internationally-recognized author and editor in space-related development, operations, education and training. Dr. Larson served in the Air Force as a GPS spacecraft engineer, spacecraft launch controller, flight test engineer, spacecraft program manager and associate professor of Astronautics. He is currently contributing to US space efforts by creating an integrated set of 18+ published books detailing "how to" design, develop, launch and operate space systems. In addition to directing the space system engineering program at Stevens, Dr. Larson is co-author, managing editor and program director of the joint NASA and DOD Space Technology Series at the United States Air Force Academy, CO, Department of Astronautics, a position he's held for two decades. He leads efforts of 362 international authors and editors to develop a series of books and tools for space mission analysis and design, as well as space system engineering—payloads, spacecraft, launch systems, operations and infrastructure. Between 1994 and 2005, Dr. Larson co-founded and served as President of Teaching Science and Technology, Inc. (TSTI), a corporation devoted to education and training in astronautics, space systems, operations and technology. TSTI created national and international continuing education and training programs for 37 Government and industry organizations. The corporation delivered over 80 courses per year. During this time Professor Larson served as Program Director for the international space system-engineering master's program, SpaceTech, with the Technical University of Delft, Netherlands. Dr. Larson also served as head of engineering for International Space University, Strasbourg, France, for two years. Dr. Larson continues to work with NASA, European Space Agency, French Space Agency, German Space Agency and over 10 national and international corporations as consultant, educator and mentor. He was certified as a major program manager within DOD. Dr. Larson is an active member of the International Academy of Astronautics.
Fausto Vieira	Fausto Vieira was born in Portugal, and he obtained his degree in Computer and Electrical Engineering from the University of Porto. In 2008 he obtained his Ph.D in Telematics Engineering at the UPC in Barcelona, in the area of Quality-of-Service over Satcom networks. He worked for several years as a senior researcher at the University of Porto where he led projects in the areas of network coding for satellite networks, intelligent transportation systems and wireless sensor networks. In 2013 he joined ESA as a Space Applications Engineer. Since then he has been a Technical Officer for more than 25 projects with industry, in many different areas from Agriculture to Tourism, and using a multitude of space assets.
Lluc Diaz	Lluc is working in the Innovation and Ventures Division of the European Space Agency where he is currently coordinating the Innovation Partners Network of ESA in ESTEC (Netherlands). Lluc is also involved in the ESA BIC management and is strongly focused on start-ups growth and equity investors' relations. Lluc has also been evaluator for the European Commission, and start-up mentor in the Space2ac programme in Poland and the Copernicus Accelerator.
Rohan Jaguste (Video link)	Rohan Jaguste, an inventor based in Stockholm and Helsinki. He creates new products and services, and I help other people turn their ideas into purposeful solutions. His interests, skills and experience allow him to combine science and art while working on ideas that concern individuals, society and the environment.