

















RLS- Sciences April Digital Week 2022

Virtual Event

4-8 April 2022, 13:30 - 15:30 Central European Summer Time



Sustainable and Resilient Regional Recoveries

Concept: 5x1: Mon-Tue-Wed-Thu-Fri (13:30 - 15:30 CEST); per day, 2 hour session

Times per Region: 7:30-9:30 Québec, Georgia

8:30-10:30 Sao Paulo

13:30-15:30 Bavaria, Upper Austria, Western Cape

19:30-21:30 Shandong

Monday, 4 April	Tuesday, 5 April	Wednesday, 6 April	Thursday, 7 April	Friday, 8 April
Joint Opening Session	Global Aerospace Campus	Energy Network	Small Satellites	Digital Health Digital Health Roadmap Panel and Discussion
Welcoming Messages RLS-Sciences Introduction and Funding Opportunities Presentation of Week and Sessions with focus on interdisciplinary perspectives	 Sneak Preview of the online course "Urban Air Mobility" Urban Air Mobility Session with regional inputs and Discussion 	 Resilient Energy Systems: Energy Security and Supply in Times of Crisis 	 Launch Scenario, Ground Station Network TOM Earth observation data for applications in geosciences 	Joint Closing Session Review and Preparation for September

Overall Aspects:

- Joint Opening and Closing Sessions
- Promote the interdisciplinary opportunities of week during Opening Session
- Dedicated session components for cross-theme participation (panel discussions, external session of Small Satellites)

Aims:

- Dedicated opportunity to come together to ensure continuity and extension of work
- Prepare for September
- Development of the RLS-Sciences network through expansion



RLS-Sciences

Virtual Event





Joint Opening Session

13:30-15:30 CEST

RLS-Sciences April Digital Week

Welcoming Messages

- o Melanie Huml, MdL, Bavarian Minister for European and International Affairs (via video message)
- o Prof. Luiz Eugênio Mello, Scientific Director, São Paulo Research Foundation (FAPESP)
- o Prof. Kodjo Agbossou, RLS-Sciences Vice President (Québec)
- o Mr. Michael Secklehner, Government of Upper Austria (Upper Austria)

• RLS-Sciences Introduction

o Dr. Sebastian Goers, President of RLS-Sciences (Upper Austria)

Funding Opportunities Highlight

o Fiona Rumohr, Administrative Coordinator Bavaria

• Presentation of the Week Sessions with focus on interdisciplinary perspectives

- o Dr. Sebastian Bickelhaupt, Prof. Klaus Schilling, Dr. Sebastian Fendt, and Gloria Stamm, in partnership with Dr. Florence Gauzy, Lead Management Partner
- o Statements from the RLS-Sciences Vice Presidents Prof. Kodjo Agbossou and Prof. João Azevedo

- Connection with the political level and dedicated opportunity for regional welcoming contributions
- Introduction to RLS-Sciences in 2022
- Promotion of cross-thematic session opportunities



RLS- Global Aerospace Campus

Virtual Event

5 April 2022, 13:30 - 15:30 *CEST*



Global Aerospace Campus

13:30-15:30 CEST

Urban Air Mobility

- Sneak Preview of the new e-Learning course: Urban Air Mobility
 - o Prof. Klaus Drechsler (Bavaria)
- Panel Presentations on Urban Air Mobility with Question and Answer
 - Prof. Constantinos Antoniou (Bavaria): COVID-19, transportation, and urban resilience: A conceptual framework
 - o Prof. Laurie Garrow (Georgia): Modelling demand for advanced air mobility
 - o Prof. Luis Rodrigues (Québec): Urban air mobility: trajectory optimization and flight control
 - o Prof. Humberto Bettini (São Paulo): Reviewing the latest on the UAM ecosystem in Brazil
 - o Moderation: Gloria Stamm (Bavaria)

- Launch of new e-Learning course
- Promotion of urban air mobility exchange at the regional level
- Preparation for 2022 September conference and Summer Summit



RLS- Energy Network

Virtual Event

6 April 2022, 13:30 - 15:30 CEST



Renewable Energy Network

13:30-15:30 CEST

Resilient Energy Systems: Energy Security and Supply in Times of Crisis

- Introduction and Welcome
 - o Dr. Sebastian Goers (Upper Austria)
- Regional Contributions on Energy Security
 - o Regional participants share short presentations on regional energy security experiences
 - o Québec (Dr. Stéphanie Simard)
 - o São Paulo (Dr. Rosana Santos)
 - o Upper Austria (Dr. Johannes Reichl)
- Bavarian Projects in International Energy Security
 - o REDEFINE H2E: international cooperation in new energy development (Dr. Sebastian Fendt)
 - DanuP-2-Gas: securing energy resilience through regional cooperation (Dr. Reinhart Schwaiberger and Astrid Heindel with DanuP-2-Gas partners)

• Panel Discussion

- Moderated discussion on energy security, system resilience, supply chain diversification, and crisis situations
 - o Moderation: Dr. Robert Tichler (Upper Austria)
 - Panellists: Prof. Matthias Garschagen (Bavaria), Dr. Maximiliane Schmiedmayer (Bavaria), Prof. Kamal
 Al-Haddad (Québec), Dr. Donato Filho (São Paulo), Dr. Johannes Reichl (Upper Austria)

- Dedication session to exchange on energy security in crisis
- Engagement on future oriented energy developments based on Bavarian-led international projects
- Preparation for September 2022



RLS- Small Satellites

Virtual Event

7 April 2022, 13:30 - 15:30 *CEST*



Small Satellites: Telematics International Mission (TIM)

13:30-15:00 CEST

Agenda Topics

• Launch:

- Securing stages towards 2022 launch
- o Review of launch scenario and timeline
- o Key preparations for 3 TOM satellites
- Integrations from the regions

Ground Station Network

Discussion of ground station network

RLS-Sciences User Community for TIM Earth Observation Data

A user community is being established to convert TOM data into relevant information for applications, such as monitoring of environment pollution, climate prediction, tracking of ash clouds from volcano eruptions, identification of ships on sea, and more. This offers excellent opportunities for partners from the field of geodata processing / remote sensing / Earth observation / geosciences to take advantage from 3D-data generated by the TOM formation

- Securing 2022 Launch of TOM satellites
- Organisation of the ground station network
- Development of a user community for TIM data across all regions



RLS- Sciences Digital Health Initiative

Virtual Event

8 April 2022, 13:30 - 15:30 CEST



Digital Health Initiative

13:30-15:00 CEST

- Discussion on Digital Health Initiatives: Introduction Dr. Sebastian Bickelhaupt (Bavaria)
- Short **Regional Presentations** on Digital Health
 - Bavaria: Trusted Ecosystem of Applied Medical Data eXchange (TEAM-X) and REducing Anxiety prior Medical Procedures using a VR digital health application (REAMP) Dr. Sebastian Bickelhaupt
 - o Georgia: Dr. Liliana Salvador
 - o Québec: Prof. Yves Joanette
 - o São Paulo: InCor, IC-Unicamp, ICMC-USP, FMRP/HCRP-USP, FC-UNESP Prof. Agma Traina
 - o Shandong: Prof. Yu Changbin with Dr. Zhen Chao and further representatives
- Panel Discussion amongst Lead Scientists
 - Lead scientists (Dr. Sebastian Bickelhaupt, Dr. Liliana Salvador, Prof. Yves Joanette, Prof. Agma Traina, Prof. Yu Changbin; moderation Dr. Florence Gauzy and Fiona Rumohr) from the regions discussing possible collaboration themes aligning to the Roadmap and preparing for September

Joint Closing Session

15:00-15:30 CEST

- Panel Discussion: Summary and Review of April Digital Week and discussion of transition to September 2022
 - Prof. Kodjo Agbossou, Prof. João Azevedo, Prof. Constantinos Antoniou, Dr. Reinhart Schwaiberger, Prof. Schilling, Dr. Sebastian Bickelhaupt with Prof. Yves Joanette, Dr. Sebastian Goers, Dr. Florence Gauzy; moderation Fiona Rumohr
- Closing Remarks
 - o Guo Xiaohong, Shandong Department of Science and Technology
 - o Stefan Schumann, Ministerialrat, Bavarian State Chancellery

Objectives:

- Development of the Digital Health Initiative group across all regions
- Opportunity for engagement amongst the Lead Scientists
- Kickstart collection of regional digital health projects/initiatives which align with the roadmap

- Review the April Digital Week
- Discuss the transition to September