



Concept: 3x1: 13:30 - 15:30 CEST; per day, 2 hour session

**Times per Region:** 7:30-9:30 Québec, Georgia  
 8:30-10:30 São Paulo  
 13:30-15:30 Bavaria, Upper Austria, Western Cape  
 19:30-21:30 Shandong

<p><b>Day 1</b> 13:30 - 15:30 CEST</p>	<p><b>Day 2</b> 13:30 - 15:30 CEST</p>	<p><b>Day 3</b> 13:30 - 15:30 CEST</p>
<p><b>Research Groups Session</b>  <b>Joint opening</b>  <b>Parallel sessions:</b></p> <ul style="list-style-type: none"> <li>• Energy Network</li> <li>• Aerospace</li> <li>• Digital Health</li> </ul>	<p><b>Cross Topic Session</b>  <u><b>Generative AI</b></u>                      Opening talk: Sebastian Bickelhaupt, Digital Health, Bavaria                      Regional panel discussion with contributions from the different research groups and from the different regions</p>	<p><b>Joint Review of Day 1 and Day 2 and Guest Talk</b>  <b>“Resilience on a regional level”,</b>  <u><b>Western Cape</b></u>                      with an introduction by Klaus Schilling, Bavaria, on “Resilient Infrastructures”</p>

**Conference Information:**  
**Hosting Region:** Bavaria  
**Conference Committee:** RLS-Sciences Presidency Group and RLS-Sciences Overall Management Team  
**Conference Management:** Munich Management Team

**Aims:**

- Fewer days while continuing in the 2-hour per day tradition
- Retention of deep exchanges within the thematic groups
- Increase in number of cross-topic sessions
- Highlight of next hosting region: Western Cape



## RLS-Sciences Digital Week 2025

*Virtual Event*

13:30 - 15:30 *Central European Summer Time*

28-30 April, 2025

### **Monday, 28 April: RLS-Sciences Research Groups Parallel Sessions**

13:30-15:30 *Central European Time*

Opening, Dr. Florence GAUZY, Bavaria

#### ● **Welcoming Message and Session Opening** (13:30 *Central European Summer Time*)

*All participants together in "Main Room"*

- Welcome- Minister Eric BEISSWENGER, Bavaria (video)
- Opening Remarks, Michaela OSKAR, Upper Austria
- Welcome Words, Dr. Janice BAILEY, Québec

#### ● **Parallel Sessions** (13:40 until 15:30, CEST)

*Participants distributed into one of three rooms, based on thematic affiliation/interest*

- RLS-Energy Network- own program, organised by Lead Scientists
- RLS-Global Aerospace Campus- own program, organised by Lead Scientists
- RLS-Digital Health- own program, organised by Lead Scientists

#### **Aims:**

- Create dedicated space for thematic research groups to deepen their ongoing work and generate new inspiration for joint outputs

#### **Times per Region:**

7:30-9:30: *Québec, Georgia*

8:30-10:30: *São Paulo*

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

19:30-21:30: *Shandong*



## RLS-Sciences Digital Week 2025

*Virtual Event*

13:30 - 15:30 *Central European Summer Time*

28-30 April, 2025

### **Monday, 28 April: RLS-Sciences Research Groups Parallel Sessions: Energy**

13:30-15:30 *Central European Time*

Opening, Dr. Florence GAUZY, Bavaria

#### ● **Welcoming Message and Session Opening** (13:30 *Central European Summer Time*)

*All participants together in "Main Room"*

- Welcome- Minister Eric BEISSWENGER, Bavaria (video)
- Opening Remarks, Michaela OSKAR, Upper Austria
- Welcome Words, Dr. Janice BAILEY, Québec

#### ● **Parallel Sessions: Energy** - Innovation Zones driving regional energy transitions - Preparing a joint RLS-Energy Network publication on regional approaches (13:40 until 15:30, CEST)

*Participants distributed into one of three rooms, based on thematic affiliation/interest*

- Introduction to Publication on Innovation Zones
- Innovation Zones, Cluster, Hubs, Ecosystems – Definitions and Integration of Energy Hubs, Dr. Matthias WELZL, Bavaria
- The Energy Axes of the International HUB for Sustainable Development at Campinas City, Prof. Carla CAVALIERO, São Paulo
- International Cross-Boundary Education Initiative on Energy Transition and Green Molecules, Prof. Raimund BROTSACK, Bavaria
  - ❖ Slido Interlude
- Update on the Quebec Innovation Zone for Energy Transition, Prof. Simon BARNABÉ, Québec
- From analytical frameworks to regional practice: Methodologies for eco-industrial park assessment and selected Innovation Zones in Upper Austria, Dr. Sebastian GOERS, Melanie KNÖBL, Upper Austria
  - ❖ Slido Interlude
- Western Cape Contribution on Provincial Energy Plan, Energy Advisor of the Western Cape Province (tbd)
- Summary, Prof. Louis GOSSELIN

#### *Aims:*

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## RLS-Sciences Digital Week 2025

*Virtual Event*

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28-30 April, 2025

### **Monday, 28 April: RLS-Sciences Research Groups Parallel Sessions: Global Aerospace Campus**

13:30-15:30 *Central European Time*

Opening, Dr. Florence GAUZY, Bavaria

#### ● **Welcoming Message and Session Opening** (13:30 *Central European Summer Time*)

*All participants together in "Main Room"*

- Welcome- Minister Eric BEISSWENGER, Bavaria (video)
- Opening Remarks, Michaela OSKAR, Upper Austria
- Welcome Words, Dr. Janice BAILEY, Québec

#### ● **Parallel Sessions: Global Aerospace Campus** (13:40 until 15:30, CEST)

*Participants distributed into one of three rooms, based on thematic affiliation/interest*

- Introduction and Overview of Trends in Sustainable Aviation, Dr. Peter HÜLSE, Bavaria
- Planning Trajectories for Advanced Air Mobility, Prof. Luis RODRIGUES, Québec
- "Catalytic Deoxygenation of Oleic Acid via In Situ Hydrogen from Glycerol Reforming: A Sustainable Pathway to Renewable Jet Fuels", Azita EBRAHIMITOURI, Québec
- Engineering the Future of Aerospace: High-Entropy Zirconates in Thermal Barrier Coatings, Hamideh VAKILIFARD, Québec
- Particulate and Gaseous Emissions of a Turbo Shaft Engine using Jet A-1, HEFA-SPK and FT-SPK, Alexander RABL, Bavaria
- Further discussions
- Summary, Dr. Peter HÜLSE, Bavaria

#### *Aims:*

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## RLS-Sciences Digital Week 2025

*Virtual Event*

13:30 - 15:30 Central European Summer Time

28-30 April, 2025

### **Monday, 28 April: RLS-Sciences Research Groups Parallel Sessions: Digital Health**

13:30-15:30 Central European Time

Opening, Dr. Florence GAUZY, Bavaria

#### ● **Welcoming Message and Session Opening** (13:30 Central European Summer Time)

*All participants together in "Main Room"*

- Welcome- Minister Eric BEISSWENGER, Bavaria (video)
- Opening Remarks, Michaela OSKAR, Upper Austria
- Welcome Words, Dr. Janice BAILEY, Québec

#### ● **Parallel Sessions: Digital Health** (13:40 until 15:30, CEST)

*Participants distributed into one of three rooms, based on thematic affiliation/interest*

- When Digital Health Multimodal Data Meet AI Tools: Insights and Challenges, Prof. Agma TRAINA, São Paulo
- Comment Round
- Best Practices for Training Health Professionals on Cybersecurity, Prof. Alina Maria DULIPOVICI, Québec
- Comment Round
- Towards Segmenting Cerebral Arteries from Structural MRI, Dr. Bertram SABROWSKY-HIRSCH, Upper Austria
- Comment Round
- Summary

#### **Aims:**

- Create dedicated space for thematic research groups to deepen their ongoing work and generate new inspiration for joint outputs

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## RLS-Sciences Digital Week 2025

*Virtual Event*

13:30 - 15:30 *Central European Summer Time*

28-30 April, 2025

### **Tuesday, 29 April: RLS-Sciences Cross-Topic Session**

Topic: **Generative AI and Learnings Out of the Regions**

13:30-15:30 *Central European Time*

Opening, PD Dr. Sebastian BICKELHAUPT, Bavaria

#### ● **Welcoming Message and Session Opening (13:30 Central European Summer Time)**

- Welcome- Prof. João AZEVEDO, São Paulo

#### ● **Regional Contributions (13:40, CEST)**

- “GenAI- from basic research to translation applications in medical imaging“, PD Dr. Sebastian BICKELHAUPT, Bavaria, Digital Health with further contributors from Digital Health (20 minutes)
- NextGenAI at UGA, Prof. Tianming LIU, Georgia, Digital Health (15 minutes)
- Quantum AI: Redefining Energy Grids and Carbon Markets, Prof. Raimund BROTSACK, Prof. LI, Sebastian ARJONA, Bavaria, Energy Network (15 minutes)
- POWERCAST: Prediction and Optimisation of Power Loads Using AI Forecasting Models for Cost and Supply-efficient Power Grids, Katharina RUSCH, Upper Austria, Energy Network (15 minutes)
- Explainable AI in Aerospace Applications, Prof. Luis RODRIGUES, Québec, Global Aerospace Campus (15 minutes)

Moderated Discussion with regional participants out of the thematic groups

#### ● **Session Conclusion and Next Steps (15:20, CEST)**

- Closing Remarks and invitation to Day 3, Prof. João AZEVEDO, São Paulo

#### *Aims:*

- Generate cross-topic exchange on a timely and universally relevant theme, with contributions from across the RLS-Sciences thematic groups and RLS partner regions
- Generate new inspirations and insights

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## RLS-Sciences Digital Week 2025

*Virtual Event*

13:30 - 15:30 Central European Summer Time

28-30 April, 2025

### **Wednesday, 30 April: RLS-Sciences Joint Review and Highlight Session**

Topic: **Resilience**

13:30-15:30 Central European Time

Opening, Dr. Florence GAUZY, Bavaria

#### ● **Welcoming Message and Session Opening (13:30 Central European Summer Time)**

- Welcome- Western Cape, Premier WINDE (live or video) and Roderick THYSSEN, Regional Coordinator
- Opening Remarks, Prof. Louis GOSSELIN, RLS-Sciences President, Québec

#### ● **Highlight on Resilience, featuring Western Cape**

Moderation: Dr. Sebastian GOERS, Upper Austria, Energy Network

- Introduction: „Secure and resilient infrastructures“, Prof. Klaus SCHILLING, Bavaria, Small Satellites (10 minutes)
- Guest Talk: Prof. Willem JORDAAN, Western Cape, Aerospace  
„Western Cape Aerospace research & industry activities, an overview“ (15 minutes, Q&A)
- Comment: Prof. Eduardo ZANCUL, São Paulo Scientific Coordinator, São Paulo (5 minutes)

#### ● **Towards Bavaria and Upper Austria 2026**

- Mixed-reality Aneurysm Clipping Simulator, Dr. Michael GIRETZLEHNER, Upper Austria, Digital Health (15 minutes)

#### ● **Week Review (14:40, CEST)**

- RLS-Energy Network (5 minutes)- Dr. Sebastian GOERS, Upper Austria
- RLS-Global Aerospace Campus (5 minutes)- Dr. Peter HÜLSE, Bavaria
- RLS-Digital Health (5 minutes)
- Cross-Topic Session: Generative AI and Learnings from the Regions (5 minutes)- PD Dr. Sebastian BICKELHAUPT

#### ● **Session Conclusion and Next Steps (15:00, CEST)**

- Closing Remarks, Announcements and Next Steps from members of the RLS-Sciences Presidency Group and Overall Management Group: PD Dr. Sebastian BICKELHAUPT and Dr. Florence GAUZY with Prof. Louis GOSSELIN and Prof. João AZEVEDO (20 minutes)

#### *Aims:*

- Bring the network together and share updates
- Highlight the upcoming hosting region (Western Cape)
- Create space for a further cross-topic, multiregional exchange, with the aim to generate new inspiration and insights

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