

# **On site Activities (preliminary) Program**

## **Novotel Barcelona Sant Joan Despi**

Carrer de la TV3, 2  
08970 Sant Joan Despi  
Spain

**Last Updated on April 25th**

**The program will be continuously updated**

NexComm 2022: <https://www.iaria.org/conferences2022/ProgramSPACOMM22.html>

ComputationWorld 2022: <https://www.iaria.org/conferences2022/PATTERNS22.html>

## **Monday, April 25, 2022**

**13:00 Reception opens (it stays open on Tuesday, Wednesday)**

Contact: Dr. Laura Garcia

### **15:00 - 16:00 Invited Special Keynote**

Efforts and Lessons Learned in Making the Morehead State University's 21-m Ground Station Operational for NASA lunar missions support

Timothy Pham, Jet Propulsion Laboratory, United States

Chair: Pascal Lorenz

### **16:00 - 16:30 Coffee**

### **16:30 - 17:30 Keynote Speech**

Theme: On-board Analytics of Earth Observation Satellite Sensor Data

Prof. Dr. Peter Baumann, Bremen Jacobs University, Germany

Chair: Pascal Lorenz

### **18:00 - 19:00 Welcome Cocktail**

Coordinator: Prof. Dr. Pascal Lorenz

## **Tuesday, April 26, 2022**

### **8:45 - 9:00 Opening**

Prof. Dr. Pascal Lorenz

### **9:00 - 10:00 Keynote Speech**

Approaches on Systems Governance and Policy

Prof. Dr. Mo Mansouri, Stevens Institute of Technology, USA, University of South-Eastern Norway, Norway, USA  
Chair: Pascal Lorenz

**10:00 - 10:15 Coffee break**

**10:15 - 11:15 Session 1 (CTRQ and SOFTENG)**

Session Chair: David Last

Multiple Regression Models for identifying the causes of Radio Access Network User Dissatisfaction

Louise Travé-Massuyès

Software Architecture Evolution of a Physical Security Information Management System

Oğuzhan Özçelik

**11:15pm - 11:30am Coffee**

**11:30 -13:00 Session 2 (ADAPTIVE)**

ADAPTIVE / AISMS: Adaptivity in Intelligent and Secure Mobile Systems

Session Chair: Marc Kurz

Introduction

Marc Kurz

MeUI - Machine Learning Enhanced Adaptive User Interaction

Marc Kurz

Tree-Based Regressors for Predicting Energy Expenditure from Heart Rate in Wearable Devices

Stephan Selinger

Context-Aware Security Intelligence of Vulnerability Scanners in Cloud-native Environments

Jens Krösche

Complex Responsive Processes in a Multi-Agent System: A Knowledge Accelerator

Guido Willemsen

Open discussion and Closing remarks

Moderator: Marc Kurz

**13:00 - 13:15 Coffee**

**13:15 - 14:15 Keynote Speech**

Theme: Ensuring compliance with the FAIR principles in access to research data by building services for data management in scientific institutions

Dr Anna Walek, Gdańsk University of Technology, Poland  
Chair: Pascal Lorenz

**14:15 - 15:15 Lunch Break**

**15:15 - 16:15 Keynote Speech**

Theme: CFTaaS: Cyber Forensics Testbed as a Service

Dr. Juan-Carlos Bennett, Naval Information Warfare Center (NIWC) Pacific, USA

Chair: Pascal Lorenz

**16:15 - 16:30 Coffee Break**

**16:30 - 18:00 Session 3 (PATTERNS)**

PATTERNS / AI-DSRWA: Maturing Artificial Intelligence - Data Science for Real-World Applications

Session Chair: Joschka Kersting

Introduction

Joschka Kersting

Tackling the "We have no Data" Challenge: Domain-Specific Machine Translation in SMEs  
Frederik Simon Bäumer

Implicit Statements in Healthcare Reviews: A Challenge for Sentiment Analysis  
Frederik Simon Bäumer

Concept of an Inference Procedure for Fault Detection in Production Planning  
Jan Michael Spoor

Track Me If You Can: Insights into Profil Interlinking on Social Networks  
Sergej Denisov

Open discussion and Closing remarks  
Moderator: Joschka Kersting

**18:00pm - 19:00pm TBD/Socializing**

**19:00pm - 21:30pm Gala Dinner**

**Wednesday, April 27, 2022**

**9:00 -10:00 Keynote Speaker**

Theme: A Journey through 15 Years of Research about Service-based Computing for the Insurance Industry - from SOA to Microservices -

Prof. Dr. Arne Koschel  
Prof. Dr. Andreas Hausotter  
Chair: Pascal Lorenz

**10:00 - 10:15 Coffee break**

**10:15 - 11:45 Session 4 (COGNITIVE, PATTERNS, and SERVICES COMPUTATION)**

Session Chair: Arne Koschel

No time to crash: Visualizing Interdependencies for optimal maintenance scheduling  
Milot Gashi

Patterns for Quantum Error Handling  
Martin Beisel

Towards the Implementation of Workflows in a Microservices Architecture for Insurance Companies - The Coexistence of Orchestration and Choreography  
Andreas Hausotter

The need of Security inside a Microservices Architecture in the Insurance Industry  
Arne Koschel

**11:45 - 12:00 Coffee**

**12:00 - 13:00 Keynote Speaker**

Theme: Pitfalls in Empirical Evaluation of Algorithms

Prof. Dr. Andreas Fischer, Technischen Hochschule Deggendorf, Germany

Chair: Pascal Lorenz

**13:00 - 15:00 Lunch Break**

**15:00 - 17:00 Session 5 (SPACOMM, ICN, MMEDIA, COGNITIVE, COMPUTATION TOOLS, and PESARO)**

Session Chair: Pascal Lorenz

Design of Highly Selective Bandpass Filter with Wide Stopband using Open Stubs and Spurlines for Satellite Communication (SATCOM) Applications  
Nitin Muchhal

Using Distributed Ledger Technology for Command and Control and Decentralized Operations  
David Last

Epipolar Shift Compensated Light Field Video Quality Metric  
Nusrat Mehajabin

A Robust Learning Rule for Memristor-based Synapses Competitive with Supervised Learning  
in Standard Spiking Neural Networks  
Thomas F Tiotto

High-pass Filters Preprocessing in Image Tracing with Convolutional Autoencoders  
Andreas Fischer

Integral Safety Layers for Residential System Development  
Mohammad Rajabali Nejad

**17:00 Wednesday Farewell**  
Prof. Dr. Pascal Lorenz