1st RESTART Tech Camp on 5G and Open RAN

a RESTART new gen initiative on practical experimentation & research

13th-15th September, 2023

Edificio Marco Polo
Sapienza Università di Roma

co-organized by:

cnit
consorzio nazionale
interuniversitario
per le telecomunicazioni

hosted by:

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UNIVERSITÀ DI ROMA

Finanziato
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Ministero
dell'Università
e della Ricerca

Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA

Day 1 - Software Defined Radios
13 September | 14:00 -18:30

14:00-14:30 | Registration, Welcome and Introduction
Giuseppe Bianchi, NAM Lab Director at CNIT
Nicola Blefari Melazzi, RESTART Foundation President
Antonio Capone, RESTART Scientific Coordinator

14:30-17:00 | Software Defined Radios for
Wireless Networks | Hands-on
Neel Pandeya, National Instruments

17:00-17:15 | Coffee Break

17:15-18:30 | Ramp Session
Workshop Attendees and Organizers

19:00-21:00 | Social Event - Aperitif
Gente di S.Lorenzo 2.0, Piazza dell'Immacolata 28

Day 2 - 5G and the O-RAN architecture
14 September | 9:00 -18:00

9:00-11:00 | Introduction to 5G and
OperAirInterface | Hands-on
Francesco Mani, OpenAirInterface

11:00-11:30 | Coffee Break

11:30-13:00 | Understanding O-RAN:
Architecture, Interfaces, Algorithms, Security,
and Research Challanges
Michele Polese, Northeastern University

13:00-14:00 | Lunch

14:00-15:00 | xApp development basics
Eugenio Moro, Politecnico di Milano

15:00-16:00 | The O-RAN in the Hat:
a tutorial on ns-O-RAN
Andrea Lacava, Northeastern University
and Sapienza, University of Rome

16:00-16:15 | Coffee Break

16:15-17:15 | Practical Hands-on 5G
Positioning
Ivan Palamà, Tor Vergata University and CNIT

17:15-18:00 | NeutRAN - neutral hosts
O-RAN based
Leonardo Bonati, Northeastern University

Day 3 - Commercial and Advanced applications
15 September | 9:00 -18:00

9:00-10:30 | A Bridge to 6G - Aerial Research
and Innovation Platform | Demo
Anupa Kelkar, Nvidia

10:30-11:00 | Coffee Break

11:00-11:40 | Open, Secure and Adaptive Spectrum
Sharing in the Upper Mid-Band (FR3)
Marco Mezzavilla, NYU Tandon School of Engineering

11:40-12:20 | O-RAN Intelligence for IAB
Eugenio Moro, Politecnico di Milano

12:20-13:00 | O-RAN Intelligence for V2X
Francesco Linsalata, Politecnico di Milano

13:00-14:00 | Lunch

14:00-18:00 | Workshop Technical Session

18:00-18:30 | Acknowledgements and Goodbye
Giuseppe Bianchi, NAM Lab Director at CNIT
Nicola Blefari Melazzi, RESTART Foundation President
Antonio Capone, RESTART Scientific Coordinator

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