



# UNIVERSITÀ DEGLI STUDI DELL'AQUILA

**Prof. Marco Pratesi**

## **Curriculum scientifico**

(Aggiornato il 2022/01/10)

Marco Pratesi received the laurea degree cum laude in Electronics Engineering from the University of L'Aquila, Italy, with a dissertation on "A model for handover algorithms analysis in cellular mobile systems". He received the Ph. D. degree in Telecommunications from the University of Roma "Tor Vergata", Italy, with a dissertation on "A general approach to the analysis of handover algorithms and outage probability in cellular mobile systems".

He is a reviewer for conferences and journals of international relevance and he has been a member of the Technical Program Committee (TPC) for international conferences.

He worked for the CNIT (National Inter-University Consortium for Telecommunications), for the Roma "Tor Vergata" unit. He has been the Project Scientist of the DAVID (DAta and Video Interactive Distribution) multi-experiment (Data Collection Experiment, Resource Sharing Experiment) satellite mission, in the context of the "Science Small Missions Programme" of the Italian Space Agency (ASI). He has been co-investigator of the national research program (W-band Analysis and VERification) of ASI, concerning a payload in the W band. He cooperated for the national research program SHINES (Satellite and Hap Integrated NETworks and Services), co-financed by the MIUR, about satellite-HAP (High Altitude Platform) integrated networks.

He is a researcher of the ING-INF/03 SSD at the University of L'Aquila, currently at the Department of Information Engineering, Computer Science and Mathematics (DISIM). He worked for the technical-scientific coordination of the project "High resilience mobile wireless networks" (Law 297/1999) in cooperation with Thales Italia s.p.a. and DEWS. In the frame of the same cooperation, he also worked for the research and training activities of the Art. 10 project.

In the terrestrial systems context, his activity focused on performance evaluation for mobile radio systems (handover algorithms, outage probability) and on mobile ad-hoc networks (MANET) operating without an existing infrastructure. He worked on study, simulation, and emulation through test-bed of ad-hoc networks and of routing protocols to seamlessly integrate them with fixed, infrastructured networks.

His current research activity is focused on heterogeneous and mobile networking, mainly mesh networks and vehicular ad-hoc networks (VANETs). Test beds of vehicular networks have been developed, using both SDR and COTS devices, to investigate current standards and simple collision avoidance algorithms, and to assess some relevant performance parameters. Driver-Assistance algorithms have also been assessed through simulations. Acquired competences have then naturally brought to the involvement in the ECSEL SafeCOP european project.

He is teaching for the "Advanced and Software Defined Networks" course for the Master Degree of Telecommunications Engineering, and for the "Telecommunications Networks" course for the B. degree of ICT Engineering.

He is responsible for the Telecommunications and Heterogeneous Network Laboratory and for the Cisco Networking Academy of the University of L'Aquila, where he operates as a certified instructor.