

### **Curriculum Vitae - prof. Gaspare Galati**

Gaspare GALATI received the Dr. Ing. Degree (Laurea) with maximum scores in Nuclear Engineering from *La Sapienza* University, Roma, Italy on March, 1970. From 1970 until 1986 he was with the company Selenia (later: Alenia, Alenia Marconi Systems, Selex) where he was involved in radar systems analysis and design. From 1984 to 1986, he headed the System Analysis Group of Selenia. With Selenia, he organized and chaired the two-weeks international Advanced Course on Modern Radar Techniques and Systems and was Editor of the resulting book "Advanced Radar Techniques and Systems" (IEE- Peter Peregrinus, 1993, 986 pages, ISBN 0-86341-172 X). As Italian representative, he has participated to the ICAO (International Civil Aviation Organization) panel named SICASP –SSR Improvements and Collision Avoidance Panel (1980-1986) and to the *Eurocontrol* Working Groups, as well as to EURET. In March 1986, after three years of part-time teaching at the Universities of Calabria and of L'Aquila, he became associate professor of Digital Signal Processing and, later on, of Radar Theory and Techniques at the Tor Vergata University, Rome. From November 1994, winner of a national competition, he was full professor of Radar and Navigation Systems at the Tor Vergata University of Rome, where he also taught Probability, Statistics and Random Processes. In 1991-99, within the National Transportation Research Project of the National Research Council (*Progetto Finalizzato Trasporti Due* / CNR) he has been responsible of one of its five areas, namely the Support Systems and Infrastructures Area, coordinating more than fifty Research Units. In 1990-1998 he has organized four international Advanced Workshops on Radar Meteorology, namely RADME 92, 94, 96 and 98, and, then, has been a member of the Program Committee of the ERAD (European Weather Radar) Conferences, held in 2000 and 2002.. He has been member, or chair, of the Program Committee of many International Conferences. In the 1990's he conceived a new architecture for the control of Surface Traffic in Airports, based on a network of millimeter-wave, high-resolution small radar *Miniradars*. The Italian Air Traffic Services, ENAV approved and founded the related 2.5 MEuro worth "Fast Prototyping" experimental plan proposed by G. Galati in cooperation with Oerlikon Contraves (now, Rheinmetall Italy) and Thales ATM. The related trials were successfully performed in the Marco Polo Airport (Venice, Italy) in 2002-2003. He has represented the Tor Vergata University Unit the National Inter-University Consortium for Telecommunications, CNIT, namely: from 2011 to 2013, in the Shareholders' Assembly (composed of representatives of each Member University), and from 2014 to 2016, in the Scientific Board, i.e. the scientific consultative organ of the Consortium. For three years starting in October, 2016 he is member of the Development Committee (*Comitato di Valorizzazione*) of the National Laboratories of CNIT and coordinates the Editorial Board of the "CNIT Technical Report" series, <https://www.cnit.it/en/other-activities/technical-reports/>.

From 1986 to 2016, G. Galati has been teacher, at the Engineering Faculty of Tor Vergata University, of (a) Radar Theory and Techniques, (b) Probability, Statistics and Random Processes, (c) Radar and Navigation, and (d) Radar Systems. Moreover, at the Economics and Financial School of the Law faculty, he teaches, for the Officers of the "Guardia di Finanza" (GdF), (e) Radio and Radar techniques. He has been tutor (*relatore*) of over 150 Master thesis in 1986-2016. He coordinated a research group of three Research Associates and a varying number of Ph.D. students. From the beginning of 2017, retired from the service at the University, he teaches, under contract, Radar Systems, and Radio and Radar techniques for the *Guardia di Finanza* officers. Moreover, in 2017 he is tutor of three Ph.D. candidates, all in Radar area, aimed to obtain their degree in 2017, 2018 and 2019 respectively. He has been appointed Honorary Professor at Tor Vergata University by the Education Ministry decree 00832-dated 20.10.2017.

His main interests are in radar theory and techniques, detection and estimation, weather radar, waveform design, Navigation and Air Traffic Management as well as the history of Radar, with publication of his volume "100 years of Radar", Springer International Publishing, Switzerland, 2016. His most recent interests are in Marine Radar, Vessel Traffic Service, Radar calibration and RCS measurements, as well as new architectures for Phased Array radar and Noise Radar. He is author/co-author of about 300 papers, 20 patents, 5 research books and 5 teaching books on those topics.