Frédéric BARBARESCO – SENSING Segment Leader, Key Technical Domain "Algorithms & Information Processing", Thales



Bio: THALES representative at European QuIC (Quantum Industry Consortium) for WG5 on the stateof-the art. Sensing Segment Leader for the THALES Corporate Technical Department (Key Technology Domain "Processing, Control & Cognition"). He is in charge of coordination of THALES Quantum Algorithms R&T activity between Business Line and TRTs (Thales Research & Technology), and of partnerships elaboration with deep-tech start-ups, academic labs and industries on quantum Algorithms & Computing. He has supervised THALES participation to first QuantX Hackathon on Quantum Algorithms (https://quantx.fr/big-quantum-hackathon/) in 2021. He has managed first benchmark of Quantum Algorithm for Radar Waveform Optimization QUBO problem on Quantum Annealer and its extension on NISQ with QAOA Algorithm (https://hal.archives-ouvertes.fr/hal-03318130/). He supervises THALES/EDF agreement on Quantum Algorithms for PDE solvers for Electromagnetic Simulation for THALES use-cases. He gave THALES talks for EuroHPC Summer Week 2022 in Paris in "Quantum Computing and use cases from industry" session, and TERATEC TQCI (Teratec Quantum Computing Initiative). THALES representative at the AI Expert Group of ASD (AeroSpace and Defense Industries Association of Europe). 2014 Aymée Poirson Prize of the French Academy of Science for the application of science to industry. Ampère Medal, Emeritus Member of the SEE, and President of the SEE ISIC club "Information and Communication Systems Engineering". General Chair of the "Geometric Science of Information" international conference and SPRINGER Book Editor on "Geometric Structures of Statistical Physics, Information Geometry, and Learning". Graduated from CentraleSupelec French High-Engineering School in 1991.