

Rome, August 2, 2017.

Novel Radar Techniques and Applications.

“Volume 1: Real Aperture Array Radar, Imaging, Radar, and Passive and Multistatic Radar”

Novel Radar Techniques and Applications.

“Volume 2: Waveform Diversity and Cognitive Radar, and Target Tracking and Data Fusion”

Editor in Chief, Dr. Richard Klemm

After more than one hundred years from its invention, the question “Whither Radar” seems obligatory: the answer lies in the monumental scientific opera edited by Dr. Richard Klemm and the five distinguished co-Editors. The statistics alone of this two-volume book are impressive: over 1300 pages, 34 chapters, subdivided in seven parts, written by about 70 international renowned experts, from University, research labs and industry.

Richard being a passionate classical pianist, I see the two-volume book as a Symphony¹ he has conceived, realized and directed with the wise and expert assistance of the five co-directors. The Authors being an orchestra of Professors each with their own specialty. Each author plays a piece of the symphony, which is in harmony across the seven parts in which the book is subdivided. The NRTA being a two-volume book with seven parts, it resembles a “super-Symphony”.

The wide spectrum of the topics covered by the two-volumes is also impressive spanning from real aperture radar, to imaging radar, to passive and multistatic radar, to waveform diversity and cognitive radar, target tracking and data fusion.

Digging into the text, one appreciates the uniformity of style, the completeness of each chapter, the wise balance between mathematical tools, systems engineering, practical applications and the extensive processing of recorded live data.

The book finds its own prestigious place and “raison d’être” in a recent flourishing of books on radar.

I strongly recommend this two-volume book to all people involved in radar study, conception, design, lab experimentation, practical implementation, users, interpretation of lessons learned from the field, and so on.

I feel that the book fully meets the IET mission, which reads: “To inspire, inform and influence the global engineering community, supporting technology innovation to meet the needs of society.”

My warm congratulations to Richard, the co-editors, the authors and all the IET organization to have made available to the international Radar Community such a great work with a perspective of long life.

Alfonso Farina, FIET, LFIEEE, FREng, Fellow of EURASIP

¹ From Cambridge dictionary, Symphony is a long piece of music for an orchestra usually with four movements (=parts).