

European School of Antennas

Our COST Action was a **Platinum Sponsor** for a Training School in the year of 2014. A total of 19 participants from our COST Action attended the following European School of Antennas (ESoA) Training School: **“Microwave Imaging and Diagnostics: Theory, Techniques, and Applications”** as trainers and trainees. This school took place in Madonna di Campiglio, Italy between the 24th and 28th of March, 2014.

The trainees that attended this school, 7 of which were directly funded by the Action, were: Ilija Merunka, Ondrej Fiser, Luca Vannucci, Jan Vrba, David Vrba (Czech Republic), Angie Fasoulo (France), Raquel Conceição (Portugal), Michele Ambrosanio, Rosa Scapatucci (Italy), Wim van Rossum (Netherlands), Pegah Tatook (Sweden), Mina Bjelogrljic (Switzerland), Adnan Elahi, Atif Shahzad (Ireland), Marija Nikolic (Serbia), Belén Larumbe (Spain). Our trainers were



Lorenzo Crocco, Tommaso Isernia and Andrea Massa from Italy – and Joe LoVetri (Canada) is currently being added as an IPC member.

In this school, and in over 30 hours of classes, the fundamental equations and main difficulties of inverse problems in high-frequency electromagnetics were introduced. The following were then introduced: classical and recently introduced solution procedures and algorithms, discussion of capabilities, limitations, and perspectives of both approximate and 'exact' reconstruction methods. Applicative examples, including exercises and lessons regard-

ing specific applications, were given to corroborate the developed concepts.

In detail the topics discussed per day during the school were the following:

Day 1:

Introduction to inverse scattering and basic theory

Day 2:

Qualitative imaging methods

Day 3:

Quantitative imaging: approximated and complete methods

Day 4:

Imaging applications: Antenna Diagnostics, BIO Applications, GPR Applications

More information can be obtained in: <http://eledia.science.unitn.it/index.php/about-us/top-news/417-esoa-course-on-microwave-imaging-and-diagnostics-info>

“Training schools are supported by MiMed to enable effective and advanced learning experience”

