

2010 ASC Board Elections – Materials



Emanuela Barzi

- Affiliation** Fermi National Accelerator Laboratory
- Position** Superconducting R&D Group leader, Technical Division
- Previous Positions** Head of the Superconducting R&D laboratory, Technical Division, Fermilab
Visitor at the Applied Superconductivity Center, University of Wisconsin, Madison
Fellow of the University of Pisa at the Collider Detector at Fermilab (CDF)
- Education** University of Pisa, Laurea, Dr. in Nuclear Engineering (1993) & Dr. in Physics (1996)
- Research Interests/
Areas of Expertise:**
- LTS and HTS wires: processing, architecture, phase growth, physical properties such as J_c , stability, magnetization, strain sensitivity, flux pinning modeling
 - LTS and HTS superconducting cables: design, fabrication and physical properties of round, Rutherford and ROEBEL type cables, sensitivity to stress and strain, magnetization, AC losses, inter-strand contact resistance, quench propagation modeling
 - Wire, cable and small HTS coil tests: cryogenics experimental equipment and techniques, design of test setups, superconducting transformers, data acquisition systems
- Publications** 145+ publications in Phys. Rev. Lett., Phys. Rev. D, SuST, IEEE and AIP, 25+ in other Conference Proceedings and has given 60+ talks and seminars (15 invited)
- Approximate Number of Years in Applied Superconductivity** 13 years
- Membership in Professional Societies** IEEE and the Italian Scientists and Scholars in North America Foundation (ISSNAF).
- Awards** Superconductor Science and Technology Prize, Forum of Superconductivity Science and Technology, Japan (2010). Fermilab Exceptional Performance Recognition Award, for a “multi-year achievements in a very successful mentoring program for engineering students” (2009)
- Previous ASC Service** Session chair 2000, 2002, 2004, Reviewer
- Service to Related Conferences** Session chair CEC/ICMC (2001, 2005, 2007). Technical editor CEC/ICMC (2005). Session chair MT-21 (2009). Referee for Cryogenics. DOE reviewer.
- Other** Since 1998, mentoring at Fermilab Summer students, as well as Laurea and PhD students from the Scuola Superiore Sant’Anna (SSSA) of Pisa, the University of Pisa, the University of Udine and Turin Polytechnics. Fermilab coordinator of a Summer internship program of Engineering graduate students from SSSA. Chairing a Laurea Student Committee in Technical Division
- Statement** ASC offers ideal opportunities for scientific and technological communications within the applied superconductivity community. If elected, I would work with my Board colleagues to expand the scope of the ASC three areas, promote young scientists and engineers in presenting their work, and involve as much as possible experienced people in the scientific programs. I would do my best to get feedback from all and improve the paper review process.