

Curriculum Vitae

Personal information

First name / Surname Stefania Farinon
address Via Dodecaneso 33 – 16146 ITALY
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Work experience

position held from 1996 to 2006	scientist at INFN (National Institute for Nuclear Physics)
position held since 2007	senior scientist at INFN (National Institute for Nuclear Physics)
main research project and scientific collaboration	
since 2020	<u>Position:</u> project leader Design and construction of a single aperture 12-14 T dipole demonstrator (FalconDexperiment)
since 2019	<u>Position:</u> design engineer Design and construction of two prototype of high temperature superconductive CCT dipoles for the INFN experiment BISCOTTO
2015-2019	<u>Position:</u> responsible for INFN WP5 activities Design of a Nb ₃ Sn 16 T superconducting dipole for the Future Circular Collider at CERN for the European experiment EuroCircol.
since 2014	<u>Position:</u> deputy project leader, from May 2021 project leader Design and construction of a model and a prototype of the superconducting dipole D2 for the High Luminosity upgrade of the Large Hadron Collider at CERN
2014-2016	<u>Position:</u> design engineer Design and construction of a vacuum calorimeter to measure with high accuracy the heat generated by a 100kCi ¹⁴⁴ Ce- ¹⁴⁴ Pr antineutrino generator for the SOX (Short distance neutrino Oscillations with BoreXino) experiment.
2014-2015	<u>Position:</u> design engineer Design and construction of the first prototype out of 27 modules of the Transport Solenoid for the Mu2e experiment at Fermilab
since 2013	<u>Position:</u> design engineer Participation to the upgrade study of the gravitational wave detector Virgo (analysis of the electromagnetic and Newtonian noise)
2013-2015	<u>Position:</u> design engineer Design of a superconducting toroidal magnet for astroparticle shielding in interplanetary manned missions for the European experiment SR2S (Space Radiation Superconductive Shield).
2011-2013	<u>Position:</u> design engineer Design, construction and test of a model superconducting quadrupole for the interaction region of SuperB factory.
2005-2010	<u>Position:</u> design engineer and responsible of the mechanical design Design and construction of a fast ramped bent superconducting dipole for the FAIR SIS300 synchrotron.
1995-2005	<u>Position:</u> responsible for the quality assurance and design engineer Design and construction of the CMS superconducting solenoid at CERN LHC.
2005-2007	<u>Position:</u> responsible for INFN-Genoa activities Development of a high performance Nb ₃ Sn conductor for the European NED project
2003-2004	<u>Position:</u> responsible for INFN-Genoa activities Design of the superconducting solenoid for the cyclotron SCENT (Superconducting Cyclotron for Exotic Nuclei and Therapy) at the LNS Laboratory of INFN.
2001-2003	<u>Position:</u> design engineer Design of a heavy ion gantry for oncologic radiotherapy at the CNAO center.
1994-1996	<u>Position:</u> design engineer Design and construction of the BABAR superconducting solenoid for the SLAC facility at Stanford.

Editorial tasks

since 2005

Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the Applied Superconductivity Conference and the Magnet Technology Conference.

2005

Chief Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the 19th Magnet Technology Conference.

2007

Chief Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the 20th Magnet Technology Conference.

2009

Lead Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the 21st Magnet Technology Conference

2010

Chief Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the 2010 Applied Superconductivity Conference.

2011

Chief Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the 22nd Magnet Technology Conference.

2012

Lead Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the 2012 Applied Superconductivity Conference.

2013

Chief Editor of the journal "IEEE Transaction on Applied Superconductivity" for the issues containing the proceeding of the 23rd Magnet Technology Conference.

2013

Chief Editor of "Journal of Physics: Conference Series" for 2013 European Conference on Applied Superconductivity

since 2019

Editor of the regular issues of the journal "IEEE Transaction on Applied Superconductivity"

Scientific committees

2013

Member of the Scientific Program Committee of the 23rd Magnet Technology Conference.

2013

Member of the Scientific Program Committee of the 2013 European Conference on Applied Superconductivity.

2014-2018

Elected member of Applied Superconductivity Conference Board Committee.

2014

Member of the Scientific Program Committee of the 2014 Applied Superconductivity Conference

2016

Member of the Scientific Program Committee of the 2016 Applied Superconductivity Conference

2018

Member of the Scientific Program Committee of the 2018 Applied Superconductivity Conference

2019

Member of the Scientific Program Committee of the 2019 European Conference on Applied Superconductivity.

2023

Member of the Scientific Program Committee of the 2023 European Conference on Applied Superconductivity.

Education and training

1990-1994

Degree in Physics at University of Genoa

Thesis about the theoretical and experimental study of the spectral response of superconducting materials exposed to varying magnetic field

Personal skills and competences

Languages

Good English, in speaking and writing, poor knowledge of French

Technical skills and competences

in-depth knowledge of design through finite element tools

Publications

Full list by topic at <https://www.ge.infn.it/~farinon/publications/pubsbytopic.html>, by year at <https://www.ge.infn.it/~farinon/publications/pubbyyear.html>

Most relevant publications:

- 1. Baseline Design of a 16 T cos theta Bending Dipole for the Future Circular Collider**
By: Valente, Riccardo; Bellomo, Giovanni; Caiffi, Barbara; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 29 Issue: 5 Article Number: 4003005 Published: AUG 2019 DOI: 10.1109/TASC.2019.2901604
- 2. The Design of Superconducting Separation Dipoles D2 for the High Luminosity Upgrade of LHC**
By: Farinon, S.; Fabbriatore, P.; Curreli, S.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 26 Issue: 4 Article Number: 4001504 Published: JUN 2016 DOI: 10.1109/TASC.2016.2523060
- 3. Modeling Experimental Magnetization Cycles of Thin Superconducting Strips by Finite-Element Simulations**
By: Iannone, G.; Farinon, S.; De Marzi, G.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 25 Issue: 1 Article Number: 8200107 Published: FEB 2015 DOI: 10.1109/TASC.2014.2345339
- 4. Experimental investigation of the transverse resistivity in Nb₃Sn wires through ac susceptibility**
By: Fabbriatore, P.; Farinon, S.; Corato, V.; et al.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume: 26 Issue: 8 Article Number: 085001 Published: AUG 2013 DOI: 10.1088/0953-2048/26/8/085001
- 5. Critical state and magnetization loss in multifilamentary superconducting wire solved through the commercial finite element code ANSYS**
By: Farinon, S.; Fabbriatore, P.; Goemoery, F.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume: 23 Issue: 11 Article Number: 115004 Published: NOV 2010 DOI: 10.1088/0953-2048/23/11/115004
- 6. The transverse resistivity in S/C multifilament wires studied through ac susceptibility measurements**
By: Fabbriatore, P.; Farinon, S.; Incardone, S.; et al.
JOURNAL OF APPLIED PHYSICS Volume: 106 Issue: 8 Article Number: 083905 Published: OCT 15 2009 DOI: 10.1063/1.3234378
- 7. Nb₃Sn wire layout optimization to reduce cabling degradation**
By: Farinon, S.; Boutboul, T.; Devred, A.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 18 Issue: 2 Pages: 984-988 Published: JUN 2008 DOI: 10.1109/TASC.2008.922299
- 8. Finite element model to study the deformations of Nb₃SR wires for the next European dipole (NED)**
By: Farinon, S.; Boutboul, T.; Devred, A.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 17 Issue: 2 Pages: 1136-1139 Part: 2 Published: JUN 2007 DOI: 10.1109/TASC.2007.899138
- 9. Overview and status of the Next European Dipole Joint Research Activity**
By: Devred, A; Baudouy, B; Baynham, DE; et al.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume: 19 Issue: 3 Special Issue: SI Pages: S67-S83 Published: MAR 2006 DOI: 10.1088/0953-2048/19/3/010
- 10. Status of the next European Dipole (NED) activity of the Collaborated Accelerator Research in Europe (CARE) project**
By: Devred, A; Baudouy, B; Baynham, DE; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 15 Issue: 2 Pages: 1106-1112 Part: 2 Published: JUN 2005 DOI: 10.1109/TASC.2005.849506