

Curriculum Vitae

Informazioni personali

Nome Stefania Farinon
indirizzo Via Dodecaneso 33 – 16146 ITALY
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e-mail [REDACTED]@info.it
nazionalità [REDACTED]
Data di nascita [REDACTED]

Formazione e occupazione

Dal 1/1/2021 ad oggi Dirigente Tecnologo presso l'INFN
Dal 2007 al 2020 Primo Tecnologo presso l'INFN
Dal 2001 to 2006 Tecnologo presso l'INFN
Dal 1996 to 2001 Posizione a tempo determinato nell'INFN per una collaborazione tecnica nell'ambito dell'esperimento CMS, con particolare riguardo allo studio dei disturbi e del comportamento meccanico della bobina superconduttrice.
dal 1994 al 1996 Borsa di Studio INFN per la progettazione magnetica meccanica e termica del solenoide superconduttore CMS
1994 Laurea in Fisica discutendo la tesi "Studio teorico e sperimentale della risposta spettrale di superconduttori esposti a campi magnetici variabili"

Progetti di ricerca e collaborazioni scientifiche

dal 2022 ad oggi Posizione: responsabile delle attività della Sezione di Genova dell'INFN dell'esperimento SIG (Superconducting Ion Gantry)
Progettazione meccanica e supervisione dell'assemblaggio di un dimostratore presso i laboratori LASA dell'INFN (Mi).

dal 2019 ad oggi Posizione: responsabile nazionale dell'esperimento INFN FalconD
Progettazione e supervisione della costruzione di un dimostratore di dipolo ad alto campo in Nb₃Sn

dal 2014 ad oggi Posizione: responsabile nazionale dell'esperimento INFN D2
Progettazione e supervisione della costruzione di un modello, di un prototipo e della serie di sei magneti del dipolo superconduttore D2 per l'upgrade ad alta luminosità del Large Hadron Collider al CERN

2015-2019 Posizione: responsabile delle attività INFN del WP5
Progettazione di un dipolo superconduttore da 16 T in Nb₃Sn per il Future Circular Collider al CERN nell'ambito dell'esperimento europeo EuroCircol.

2014-2016 Posizione: responsabile della progettazione
Progettazione e costruzione di un calorimetro per la misura ad altissima accuratezza del calore generato dalla sorgente di antineutrini 100kCi ¹⁴⁴Ce-¹⁴⁴Pr per l'esperimento INFN SOX

2014-2015 Posizione: progettista
Progettazione e costruzione del primo prototipo sui 27 moduli del solenoide di trasporto per l'esperimento Mu2e al Fermilab.

2013-2021 Posizione: collaborazione
Partecipazione agli studi sul rumore elettromagnetico e newtoniano per l'upgrade del rivelatore di onde gravitazionali Virgo

2013-2015	<u>Posizione:</u> progettista Progettazione di un magnete toroidale superconduttore per la schermatura di astroparticelle in missioni interplanetarie con equipaggio per l'esperimento europeo SR2S (Space Radiation Superconductive Shield).
2011-2013	<u>Posizione:</u> collaborazione alla progettazione e ai test Progettazione, costruzione e test di un modello di quadrupolo superconduttore per la regione di interazione della SuperB factory.
2005-2010	<u>Posizione:</u> responsabile della progettazione meccanica Progettazione e costruzione di un dipolo superconduttore a rampa veloce per il sincrotrone FAIR SIS300.
1995-2005	<u>Posizione:</u> progettista e responsabile della Qualità Progettazione e costruzione del solenoide superconduttore CMS al CERN LHC.
2005-2007	<u>Posizione:</u> responsabile delle attività della Sezione di Genova dell'INFN Sviluppo di un conduttore di Nb ₃ Sn ad alte prestazioni per il progetto europeo NED.
2003-2004	<u>Posizione:</u> responsabile delle attività della Sezione di Genova dell'INFN Progettazione del solenoide superconduttore per il ciclotrone SCENT (Superconducting Cyclotron for Exotic Nuclei and Therapy) presso il Laboratorio LNS dell'INFN.
2001-2003	<u>Posizione:</u> progettista Progettazione di un gantry a ioni pesanti per la radioterapia oncologica al centro CNAO.
1994-1996	<u>Posizione:</u> progettista Progettazione e costruzione del solenoide superconduttore BABAR per l'impianto SLAC di Stanford.

Incarichi editoriali

dal 2005 ad oggi	<u>Editore</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti gli atti della Applied Superconductivity Conference e della Magnet Technology Conference.
dal 2019 ad oggi	<u>Editore</u> dei numeri regolari della rivista "IEEE Transaction on Applied Superconductivity"

Incarichi speciali:

2005	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 19 th Magnet Technology Conference.
2007	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 20 th Magnet Technology Conference.
2009	<u>Lead Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 21 st Magnet Technology Conference
2010	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 2010 Applied Superconductivity Conference.
2011	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 22 nd Magnet Technology Conference.
2012	<u>Lead Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 2012 Applied Superconductivity Conference.
2013	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 23 rd Magnet Technology Conference.
2013	<u>Chief Editor</u> di "Journal of Physics: Conference Series" per la 2013 European Conference on Applied Superconductivity

Comitati scientifici

2013	Membro del Comitato del Programma Scientifico della 23 rd Magnet Technology Conference.
2013	Membro del Comitato del Programma Scientifico della 2013 European Conference on Applied Superconductivity.
2014-2018	Membro eletto dell'Applied Superconductivity Conference Board Committee.

2014	Membro del Comitato del Programma Scientifico della 2014 Applied Superconductivity Conference
2016	Membro del Comitato del Programma Scientifico della 2016 Applied Superconductivity Conference
2018	Membro del Comitato del Programma Scientifico della 2018 Applied Superconductivity Conference
2019	Membro del Comitato del Programma Scientifico della 2019 European Conference on Applied Superconductivity.
2023	Membro del Comitato del Programma Scientifico della 2023 European Conference on Applied Superconductivity.

Attività e incarichi accademici

dall'A.A. 2021-2022 ad oggi

Docente per la Laurea Magistrale in Fisica: "Fisica e tecnologia dei magneti superconduttori" (24 ore)

dall'A.A. 2018-2019 ad oggi

Docente nel corso della Scuola di Dottorato in Fisica: "Progettazione di magneti superconduttori" (20 ore)

da Febbraio 2021 ad oggi

Membro del Collegio di Dottorato in Fisica

Relatrice delle seguenti tesi di laurea Magistrale:

A.A. 2000-2001 Luca Reina, Ingegneria meccanica

Tesi dal titolo: "Ottimizzazione dei parametri caratteristici di un magnete superconduttore tramite analisi FEM pilotate da algoritmi genetici"

A.A. 2001-2002 Thomas Coltella, Ingegneria meccanica

Tesi dal titolo: "Progetto meccanico delle strutture di contenimento di un magnete superconduttore per adroterapia oncologica"

A.A. 2018-2019 Filippo Levi, Fisica

Tesi dal titolo: "Studio degli effetti meccanici, magnetici e termici sulla qualità di campo di dipoli superconduttori per acceleratori adronici e del dipolo D2 per l'upgrade High-Luminosity di LHC"

A.A. 2019-2020 Ludovico Musenich, Ingegneria meccanica

Tesi dal titolo: "Modellazione FEM per la verifica strutturale del telaio portante del rivelatore di materia oscura DarkSide-20k"

A.A. 2020-2021 Gianluca Vernassa, Ingegneria meccanica

Tesi dal titolo: "Thermomechanical and electromagnetic analyses on a superconducting demonstrator magnet for Hadron Therapy"

A.A. 2020-2021 Francesco Lonardo, Ingegneria nucleare

Tesi dal titolo: "The D2 magnets for the LHC Luminosity upgrade: from prototype to series construction"

A.A. 2021-2022 Nicola Sala, Ingegneria meccanica

Tesi dal titolo: "Design and Optimization of the 2D cross-section for high field Nb3Sn magnets towards future accelerators"

A.A. 2022-2023 Emma Bianchi, Ingegneria meccanica

Tesi dal titolo: "Progettazione della struttura meccanica del dipolo superconduttore SIG per un gantry a ioni"

A.A. 2023-2024 Elena Cereghino

Tesi dal titolo: "Analisi sperimentale e numerica di tecnologie innovative di magneti superconduttori per le future applicazioni mediche e di fisica delle alte energie"

Supervisore delle seguenti tesi di Dottorato in Fisica:

XXXV Ciclo (2019) Filippo Levi

Tesi dal titolo: "Optimization and control of the field quality and the mechanical structure of superconducting dipoles for future accelerators"

XXXVI Ciclo (2020) Sergio Burioli

Tesi dal titolo: "Mechanical effects on the performances of the superconducting cables and magnets for future accelerators"

XXXVIII Ciclo (2022) Daniel Novelli

Tesi dal titolo: "Development of superconducting magnets for the future FCC-hh and Muon Collider accelerators"

XXXIX Ciclo (2023) Alessio Dellacasagrande

Tesi dal titolo: "Conceptual electromagnetic design of the detector magnet for the ALICE 3 upgrade"

**Capacità e competenze
personali**

Lingue
Capacità e competenze
tecniche

Buon inglese, parlato e scritto, conoscenza del francese

conoscenza approfondita della progettazione con strumenti ad elementi finiti

GENOVA, 30 maggio 2024

Stefania Farinon



2024

- 1. GWTC-2.1: Deep extended catalog of compact binary coalescences observed by LIGO and Virgo during the first half of the third observing run**
LIGO Sci Collaboration ; LIGO Sci Collaboration ; Virgo Collaboration
PHYSICAL REVIEW D Volume: 109 Issue: 2 Article Number: 022001 DOI: 10.1103/PhysRevD.109.022001 Published: JAN 2024.
- 2. Towards a muon collider**
Accettura, C; Adams, D; (...); Zurita, J
EUROPEAN PHYSICAL JOURNAL C Volume: 84 Issue 1 Article Number: 36 DOI: 10.1140/epjc/s10052-023-12257-5
Published: JAN 2024.
- 3. IRIS-A New Distributed Research Infrastructure on Applied Superconductivity**
Rossi, L; Arpaia, P; (...); Vannozzi, A
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 3 Article Number: 9500309 DOI: 10.1109/TASC.2023.3341984 Published: MAY 2024.
- 4. Status on the Development of the Nb₃Sn 12 T Falcon Dipole for the FCC-hh**
Valente, RU; Ballarino, A; (...); Vernassa, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 3 Article Number: 4900405 DOI: 10.1109/TASC.2023.3338166 Published: MAY 2024.
- 5. Magnets for a Muon Collider-Needs and Plans**
Bottura, L; Accettura, C; (...); Zlobin, A
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4005708 DOI: 10.1109/TASC.2024.3382069 Published: AUG 2024.
- 6. MBRD Prototype Cold Tests: Mechanical Stability and Performances**
Bersani, A; Bracco, M; (...); Willering, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4005005 DOI: 10.1109/TASC.2024.3371938 Published: AUG 2024.
- 7. Analytical Evaluation of Dipole Performance Limits for a Muon Collider**
Novelli, D; Bersani, A; (...); Valente, R
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4002405 DOI: 10.1109/TASC.2024.3352526 Published: AUG 2024.
- 8. Validation of the Protection Scheme for the HL-LHC MBRD Magnet by Simulations and Prototype Tests**
Caiffi, B; Bender, L; (...); Willering, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4001405 DOI: 10.1109/TASC.2023.3346363 Published: AUG 2024.
- 9. The Development of MBRD Magnets, the Separation/Recombination Dipoles for the LHC High Luminosity Upgrade**
Farinon, S; Angius, S; (...); Willering, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4003205 DOI: 10.1109/TASC.2024.3357469 Published: AUG 2024.
- 10. First Winding Trial for the Superconducting Ion Gantry (SIG) Dipole Demonstrator Magnet**
Prioli, M; Bianchi, E; (...); Karppinen, M
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4402605 DOI: 10.1109/TASC.2024.3361440 Published: AUG 2024.

11. Magnesium Diboride Magnets for Future Particle Detectors

Musenich, R; Bersani, A; (...); Farinon, S

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4500304 DOI: 10.1109/TASC.2023.3342760 Published: AUG 2024.

12. Field Quality Analysis of the Separation-Recombination Dipole MBRD for the High-Luminosity Upgrade of LHC

Pampaloni, A; Bersani, A; (...); Willering, G

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4000505 DOI: 10.1109/TASC.2023.3345826 Published: AUG 2024.

13. Mechanical Design of the 4 T Curved Demonstrator Dipole for the SIG Gantry

Levi, F; Bersani, A; (...); Valente, R

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4400505 DOI: 10.1109/TASC.2023.3333262 Published: AUG 2024.

14. 2D EM Design and Innovative Winding Technique for a 4 T High Curvature Superconducting Dipole in Block Coil Configuration for Next Generation Ion Gantries

Gagno, A; Farinon, S; (...); Valente, RU

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4400305 DOI: 10.1109/TASC.2023.3335181 Published: AUG 2024.

2023

15. Mu2e Run I Sensitivity Projections for the Neutrinoless $\mu(-) \rightarrow e(-)$ Conversion Search in Aluminum

Mu2e Collaboration

UNIVERSE Volume: 9 Issue: 1 Article Number: 54 DOI: 10.3390/universe9010054 Published: JAN 2023.

16. Population of Merging Compact Binaries Inferred Using Gravitational Waves through GWTC-3

LIGO Sci Collaboration; Virgo Collaboration; Kagra Collaboration

PHYSICAL REVIEW X Volume: 13 Issue: 1 Article Number: 11048 DOI: 10.1103/PhysRevX.13.011048 Published: MAR 2023.

17. The superconducting space magnet of the ALADInO spectrometer

Musenich, R; Bersani, A; Bracco, M; Burioli, S; Caiffi, B; Farinon, S; Gagno, A; Levi, F; Pampaloni, A

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 1051 Article Number: 168239 DOI: 10.1016/j.nima.2023.168239 Published: JUN 2023.

18. Constraints on the Cosmic Expansion History from GWTC-3

LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration; Virgo Collaboration; KAGRA Collaboration

ASTROPHYSICAL JOURNAL Volume: 949 Issue: 2 Article Number: 76 DOI: 10.3847/1538-4357/ac74bb Published: JUN 2023.

19. Status and Challenges of the Interaction Region Magnets for HL-LHC

Todesco, E; Bermudez, SI; (...); Cooley, L

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 33 Issue: 5 Article Number: 4001608 DOI: 10.1109/TASC.2023.3244143 Published: AUG 2023.

20. Design of a 4 T Curved Demonstrator Magnet for a Superconducting Ion Gantry

Prioli, M; De Matteis, E; (...); Valente, RU

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 33 Issue: 5 Article Number: 4400505 DOI: 10.1109/TASC.2023.3244523 Published: AUG 2023.

21. Protection Scheme Effectiveness Study for the High-Luminosity LHC MBRD Magnet

Caiffi, B; Bender, L; (...); Willering, G

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS

DETECTORS AND ASSOCIATED EQUIPMENT Volume: 33 Issue 5 Article Number: 4701304 DOI: 10.1109/TASC.2023.3247984 Published: AUG 2023.

22. Updates on the Mechanical Design of FalconD, a Nb₃Sn Cos theta Short Model Dipole for FCC-hh

Levi, F; Ballarino, A; (...); Wachal, P

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 33 Issue: 5 Article Number: 4000805 DOI: 10.1109/TASC.2023.3241832 Published: AUG 2023.

23. Optimization of Electromagnetic Design After Winding Tests for the Nb₃Sn Cos-Theta Dipole Model for FCC-hh

Valente, RU; Ballarino, A; (...); Vernassa, G

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY D Volume: 33 Issue: 5 Article Number: 4601107 DOI: 10.1109/TASC.2023.3246421 Published: AUG 2023.

24. The MBRD Dipoles for the Luminosity Upgrade at the LHC: From Prototype Tests to the Series Production

Farinon, S; Angius, S; (...); Willering, G

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY D Volume: 33 Issue: 5 Article Number: 4000306 DOI: 10.1109/TASC.2023.3238988 Published: AUG 2023.

25. Virgo detector characterization and data quality: results from the O3 run

Acernese, F; Agathos, M; (...); Zendri, JP

CLASSICAL AND QUANTUM GRAVITY Volume: 40 Issue 18 Article Number: 185006 DOI: 10.1088/1361-6382/acd92d Published: SEP 2023.

26. Virgo detector characterization and data quality: tools

Accettura, C; Adams, D; (...); Zurita, J

CLASSICAL AND QUANTUM GRAVITY Volume: 40 Issue 18 Article Number: 185005 DOI: 10.1088/1361-6382/acdf36 Published: SEP 2023.

27. Towards a muon collider

Acernese, F; Agathos, M; (...); Zendri, JP

EUROPEAN PHYSICAL JOURNAL C Volume: 83 Issue 9 Article Number: 864 DOI: 10.1140/epjc/s10052-023-11889-x Published: SEP 2023.

28. Search for Gravitational Waves Associated with Fast Radio Bursts Detected by CHIME/FRB during the LIGO-Virgo Observing Run O3a

LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration; Virgo Collaboration; KAGRA Collaboration; CHIME FRB Collaboration

ASTROPHYSICAL JOURNAL Volume: 955 Issue 2 Article Number: 155 DOI: 10.3847/1538-4357/acd770 Published: OCT 2023.

29. GWTC-3: Compact Binary Coalescences Observed by LIGO and Virgo during the Second Part of the Third Observing Run

LIGO Sci Collaboration; Virgo Collaboration; KAGRA Collaboration

PHYSICAL REVIEW X Volume: 13 Issue 4 Article Number: 41039 DOI: 10.1103/PhysRevX.13.041039 Published: DEC 2023.

2022

30. Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data

Abbott, R; Abbott, TD; (...); Strohmayer, TE

PHYSICAL REVIEW D Volume: 105 Issue: 2 Article Number: 022002 DOI: 10.1103/PhysRevD.105.022002 Published: JAN 19 2022

31. Can electrons neutralize the electrostatic charge on test mass mirrors in gravitational wave detectors?

Spallino, L; Angelucci, M; (...); Cimino, R

PHYSICAL REVIEW D Volume: 105 Issue: 4 Article Number: 042003 DOI: 10.1103/PhysRevD.105.042003 Published: FEB 17 2022

- 32. Calibration of advanced Virgo and reconstruction of the detector strain $h(t)$ during the observing run O3**
Acernese, F; Agathos, M; (...); Zendri, JP
CLASSICAL AND QUANTUM GRAVITY Volume: 39 Issue: 4 Article Number: 045006 DOI: 10.1088/1361-6382/ac3c8e
Published: FEB 17 2022
- 33. Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo**
Abbott, R; Abbott, TD; (...); Zweizig, J
ASTRONOMY & ASTROPHYSICS Volume: 659 Article Number: A84 DOI: 10.1051/0004-6361/202141452 Published:
MAR 16 2022
- 34. Constraints on dark photon dark matter using data from LIGO's and Virgo's third observing run**
Abbott, R; Abbott, TD; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 105 Issue: 6 Article Number: 063030 DOI: 10.1103/PhysRevD.105.063030 Published:
MAR 31 2022
- 35. Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3b**
Abbott, R; Abbott, TD; (...); Zweizig, J
ASTROPHYSICAL JOURNAL Volume: 928 Issue: 2 Article Number: 186 DOI: 10.3847/1538-4357/ac532b Published:
APR 1 2022
- 36. Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants**
Abbott, R; Abbott, TD; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 105 Issue: 8 Article Number: 082005 DOI: 10.1103/PhysRevD.105.082005 Published:
APR 28 2022
- 37. All-sky search for gravitational wave emission from scalar boson clouds around spinning black holes in LIGO O3 data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 105 Issue: 10 Article Number: 102001 DOI: 10.1103/PhysRevD.105.102001
Published: MAY 9 2022
- 38. Narrowband Searches for Continuous and Long-duration Transient Gravitational Waves from Known Pulsars in the LIGO-Virgo Third Observing Run**
Abbott, R; Abbott, TD; (...); Weltevrede, P
ASTROPHYSICAL JOURNAL Volume: 932 Issue: 2 Article Number: 133 DOI: 10.3847/1538-4357/ac6ad0 Published:
JUN 1 2022
- 39. A European Collaboration to Investigate Superconducting Magnets for Next Generation Heavy Ion Therapy**
Rossi, L; Ballarino, A; (...); Vieweg, M
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 4 Article Number: 4400207 DOI:
10.1109/TASC.2022.3147433 Published: JUN 2022
- 40. Update on the Electromagnetic Design of the Nb3Sn Cos-Theta Dipole Model for FCC-hh**
Valente, RU; Burioli, S; (...); Tommasini, D
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 4 Article Number: 4001005 DOI:
10.1109/TASC.2022.3152100 Published: JUN 2022
- 41. All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGO's and Advanced Virgo's first three observing runs**
Abbott, R; Abe, H; (...); Zweizig, J
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 105 Issue: 12 Article Number: 122001 DOI:
10.1103/PhysRevD.105.122001 Published: JUN 2022

- 42. First joint observation by the underground gravitational-wave detector KAGRA with GEO 600**
Abbott, R; Abe, H; (...); Zweizig, J
PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS Volume: 2022 Issue: 6 Article Number: 063F01 DOI: 10.1093/ptep/ptac073 Published: JUN 9 2022
- 43. Searches for Gravitational Waves from Known Pulsars at Two Harmonics in the Second and Third LIGO-Virgo Observing Runs**
Abbott, R; Abe, H; (...); Weltevrede, P
ASTROPHYSICAL JOURNAL Volume: 935 Issue: 1 Article Number: 1 DOI: 10.3847/1538-4357/ac6acf Published: AUG 1 2022
- 44. Search for Subsolar-Mass Binaries in the First Half of Advanced LIGO's and Advanced Virgo's Third Observing Run**
Abbott, R; Abe, H; (...); Weltevrede, P
PHYSICAL REVIEW LETTERS Volume: 129 Issue: 6 Article Number: 061104 DOI: 10.1103/PhysRevLett.129.061104 Published: AUG 5 2022
- 45. Search for continuous gravitational wave emission from the Milky Way center in O3 LIGO-Virgo data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 106 Issue: 4 Article Number: 042003 DOI: 10.1103/PhysRevD.106.042003 Published: AUG 9 2022
- 46. A Complete Magnetic Design and Improved Mechanical Project for the DUNE ND-GAr Solenoid Magnet**
Bersani, A; Bross, AD; (...); Pallavicini, M
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4500204 DOI: 10.1109/TASC.2022.3162168 Published: SEP 2022
- 47. The Separation-Recombination Dipole MBRD for the High-Luminosity LHC: From Prototype to Series**
Levi, F; Bersani, A; (...); Todesco, E
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 DOI: 10.1109/TASC.2022.3160975 Published: SEP 2022
- 48. Preliminary Study of 4 T Superconducting Dipole for a Light Rotating Gantry for Ion-Therapy**
Rossi, L; Benedetto, E; (...); Valente, RU
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4400506 DOI: 10.1109/TASC.2022.3157663 Published: SEP 2022
- 49. Numerical Model, Parametric Analysis, and Optimization of FCC's 16 T Main Dipole Baseline Design**
Kokkinos, C; Farinon, S; (...); Rodopoulos, D
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4001306 DOI: 10.1109/TASC.2022.3152710 Published: SEP 2022
- 50. Mechanical Design of FalconD, a Nb₃Sn Cos theta Short Model Dipole for the FCC**
Pampaloni, A; Bellomo, G; (...); Valente, RU
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4000605 DOI: 10.1109/TASC.2022.3149679 Published: SEP 2022
- 51. Search for gravitational waves from Scorpius X-1 with a hidden Markov model in O3 LIGO data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 106 Issue: 106 Article Number: 062002 DOI: 10.1103/PhysRevD.106.062002 Published: SEP 21 2022
- 52. All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO and Advanced Virgo O3 data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 106 Issue: 10 Article Number: 102008 DOI: 10.1103/PhysRevD.106.102008 Published: NOV 28 2022

53. The Virgo O3 run and the impact of the environment

Abbott, R; Abe, H; (...); Zweizig, J

CLASSICAL AND QUANTUM GRAVITY Volume: 39 Issue: 23 Article Number: 063F01 DOI: 10.1088/1361-6382/ac776a Published: DEC 1 2022

2021

54. A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo (vol 908, 218, 2021)

Abbott, R; Abbott, TD; (...); Zweizig, J

PHYSICAL REVIEW D Volume 104 Issue 12 Article Number 122004 DOI 10.1103/PhysRevD.104.122004 Published DEC 2021

55. A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo (vol 908, 218, 2021)

Abbott, R; Abbott, TD; (...); Zweizig, J

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