

Filippo Fecit

Born on March 19th, 1998 Genova – ITALY

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in Linkedin Profile

Personal Webpage

Scientific Interests

- o Theoretical and Particle Physics
- Mathematical Physics
- o Gravitational Physics

Languages

Italian • Mother tongue

English • Proficient

AcES Certificate (2024) %

German • Conversational

Goethe-Zertifikat B1 (2016)

Tools

LaTex

Mathematica

Python

C++

Matlab

Education

Nov. 2022 - In progress. PhD in Physics XXXVIII Cycle

University of Bologna - Alma Mater Studiorum

Sep. 2021 - Feb. 2022. Erasmus Fellowship

Technische Universitat Wien

Sep. 2020 - Jun. 2022. Master Degree in Physics

University of Genova

Mark: 110/110 cum laude

Thesis Title: Physical Consequences of a Non-Flat Spacetime

for Topological States of Matter Supervisor: Prof. Nicola Maggiore

Sep. 2017 – Jul. 2020. Bachelor Degree in Physics

University of Genova

Mark: 109 /110

Thesis Title: Mössbauer Effect. Treatment with the tools of

Statistical Quantum Mechanics

Sep. 2012 – Jun. 2017. High School Diploma

Liceo Scientifico "G.D.Cassini" bilingual (English-German)

Mark: 100/100

Publications

Topological BF description of 2D accelerated chiral edge modes
 Authors: E. Bertolini, <u>F. Fecit</u>, N. Maggiore
 Symmetry 14 (2022) no.4, 675, doi: 10.3390/sym14040675

 [arXiv:2203.13520 [hep-th]].

• Six-dimensional one-loop divergences in quantum gravity from the $\mathcal{N}=4$ spinning particle

Authors: F. Bastianelli, F. Comberiati, <u>F. Fecit</u>, F. Ori JHEP **10** (2023) 152, doi:10.1007/JHEP10(2023)152 [arXiv:2307.09353 [hep-th]].

• Massive gravity from a first-quantized perspective

Author: $\underline{F. Fecit}$

Eur. Phys. J. C **84** (2024) 445 [arXiv:2312.15428 [hep-th]].

doi:10.1140/epjc/s10052-024-12799-2

 $\bullet \ \ Worldline \ path \ integral \ for \ the \ massive \ graviton$

Author: F. Fecit

Eur. Phys. J. C $\bf 84~(2024)~339~[arXiv:2402.13766~[hep-th]].$

doi:10.1140/epjc/s10052-024-12707-8 %

Talks and Seminars

Talk: Massive Gravity in the Worldline Formalism.

Invited speaker to TFI 2024: Theories of the Fundamental Interactions, September 23-25, 2024 - Naples, Italy.

Seminar: Physical consequences of a non-flat spacetime for topological states of matter.

February 14, 2022 - TU Wien, Vienna, Austria.

Seminar: Massive Gravity in the Worldline Formalism.

March 18, 2024 - Worldline Meetings (online).

June 12, 2024 - HU Berlin, Berlin, Germany.

Teaching Experience

Sep. 2023 – In progress. Teaching Assistantship

University of Bologna

Aimed at first-year physics students. Course: Calculus.

Aimed at first-year material science students. Course: Mathematics.

Oct. 2021 - Jun. 2022. Teaching Assistantship

University of Genova

Aimed at first-year engineering students, in English. Subjects: Mathematics and Physics. Courses:

Mathematics, Algebra, Physics I and Physics II for the Maritime Science and Technology degree.

Organisational and Communication skills

Nov. 2022 - In progress. PhD Student Representative

Sep. 2018 – Jul. 2022. Student Representative

Work experience

Oct. 2019 - In progress. Scientific Animator

Festival della Scienza %

I have been a science animator for the Festival della Scienza in the editions of 2019, 2020, 2022, 2023 and 2024.

I have been assigned to both physics laboratories and astrophysics and astrophotography exhibitions. The focus was to disseminate scientific concepts in an accessible way to the general public, with special attention to elementary, middle and high school students.

Feb. 2018 - Mar. 2023. Community manager

Tatabox Soc. Coop. Sociale % · Part-time

I have been a member and part-time employee of Tatabox Cooperativa Sociale. My responsibilities included managing the reception of customers, presence in the spaces, the cash desk and the sales of the shop. I dealt

