

Jann Zosso

Center of Gravity
Niels Bohr Institute
University of Copenhagen
Blegdamsvej 17
2100 Copenhagen Ø
jann.zosso@nbi.ku.dk

Education

PhD

- 10.2019-01.2024 **ETH Zürich.** CH, Institute for Theoretical Physics, Theoretical Cosmology Group.
Doctor of Sciences in Physics.
Advisor - Prof. Dr. Lavinia Heisenberg, Prof. Dr. Philippe Jetzer
PhD Thesis - "Probing gravity - Fundamental Aspects of Metric Theories and their Implications for tests of General Relativity".
- 09.2022-02.2023 **University of Illinois at Urbana-Champaign.** USA, ICASU, Illinois Relativity Group.
Academic exchange. *Advisor* - Prof. Dr. Nicolás Yunes

Master

- 09.2016-07.2018 **EPFL.** CH, Theoretical Particle Physics Laboratory.
Master of Science in Physics.
Advisor - Prof. Dr. Riccardo Rattazzi. *Grade* - 5.77 / 6.
Master Thesis - "Holographic duality at large charge", 6.00 / 6.

Bachelor

- 09.2012-07.2015 **EPFL.** Bachelor of Science in Physics. *Grade* - 5.30 / 6, *Propaedeutic Exam* - 5.59 / 6.
- 08.2014-07.2015 **University of Waterloo.** CA. Academic exchange abroad. *Grade* - 94.10 / 100 (A⁺).
Bachelor Project - "Understanding bacterial chromosome compaction", 93 / 100 (A⁺).

Matriculation

- 09.2008-07.2012 **Collège St-Michel.** CH, Bilingual matriculation (German/French). *Grade* - 5.39 / 6.
Matriculation Project - "Comparing the HIV-Therapy between world regions", 6.00 / 6.

Employment History

- 05.2025-ongoing **University of Copenhagen.** SNF Postdoctoral Research Fellow at the Center of Gravity, NBI.
- 09.2024-04.2025 **University of Bern.** SNF Postdoctoral Research Fellow at the Albert Einstein Center, ITP.
- 10.2019-01.2024 **ETH Zürich.** Graduate research and teaching assistant at ITP.
- 09.2022-02.2023 **University of Illinois at Urbana-Champaign.** Research associate at ICASU.
- 11.2018-02.2019 **EPFL.** Scientific guest at LPTP.
- 08.2018-10.2018 **HAFL.** Scientific collaborator (civil service).
- 03.2016-06.2016 **HEIA.** Scientific collaborator (civil service).

Awards and Fellowships

12.2023	SNF Postdoc.Mobility Fellowship - carried out at the University of Bern, Switzerland, and the Niels Bohr Institute, Denmark.
10.2023	Nomination for the ETH Medal.
10.2022	2022 Blue Apple Prize for the best graduate student talk at the Midwest Relativity Meeting.
04.2022	ETH Zürich Doc.Mobility Fellowship - carried out at the ICASU, UIUC.
05.2022	1 st prize for the best PhD speaker at the Atlantic General Relativity 2022 conference.
07.2019	Nomination for the Lopez-Loreta Prize, EPFL.
07.2012	Award from the Mathematics and Natural Science department of the University of Fribourg for “an outstanding matriculation project in mathematics and natural sciences”.
07.2012	Award for the best student of the matriculation class, Collège St-Michel.

Membership of Large Collaborations

07.2023-ongoing	LISA Consortium. Full membership, affiliation to the working groups of Fundamental Physics (FPWG) and Cosmology (CosWG). Coordinator of FPWG Memory Projects.
07.2025-ongoing	International Astronomical Union (IAU). Junior membership.

Mentoring of Graduate Research

Master Thesis

09.2025-ongoing	University of Copenhagen. G. Fuglsang Gudmandsen, “Towards a realistic account of gravitational memory”.
10.2024-04.2025	University of Bern, Heidelberg University, University of Padova. B. Rosatello, “ Gravitational wave memory in modified gravity theories ”, article published in PRD (2025).
08.2020-06.2021	ETH Zürich, LMU Munich. A. Kumar, “ Quantum stability of a new Proca theory ”, article published in PRD (2022).

Master Projects

02.2023-08.2023	ETH Zürich. Supervision of a Semester Project on Gravitational Wave Memories in Horndeski and Generalized Proca Theories, article published in JCAP (2024).
02.2022-06.2022	ETH Zürich. Supervision of a Semester Project on quantum-information theoretic insights on the black hole information paradox.

Teaching Experience

10.2019-08.2022	ETH Zürich. Teaching assistant for the <i>Graduate courses:</i> “General Relativity”, “Symmetries in Physics”, “Theoretical Cosmology”. <i>Undergraduate courses:</i> “Classical Mechanics”, “Quantum Mechanics II”.
02.2017-06.2018	EPFL. Teaching assistant for the <i>Undergraduate courses:</i> “Analysis III”, “Analytic Geometry”, “General Physics”, “Physics for Mechanical Engineering”.
09.2011-06.2012	Collège St-Michel. Teaching of weekly extra tuitions in Chemistry and Mathematics.

Invited Talks

- 11.2025 “Measuring gravitational memory with LISA”. *Theoretical Tools for Gravitational Wave Physics, ETHZ, CH.*
- 01.2025 “Measuring the Non-Linearity of Gravity”. *Seminar Kosmologie Forschungsgruppe, Institute for Theoretical Physics, Heidelberg University, DE.*
- 12.2024 “Measuring the Non-Linearity of Gravity”. *Fields and Strings Seminar, Institute for Theoretical Physics, University of Bern, CH.*
- 11.2024 “Gravitational Wave Memory - Lessons to be learned from the scars in the fabric of spacetime left behind by the energy-momentum of GWs”. *Cosmology and Particle Physics Seminar, Institute for Theoretical Physics, Heidelberg University, DE.*
- 09.2023 “Cosmological Tensions Guiding the Path Beyond Λ CDM”. *DARK Energy: from Fundamental Theories to Observations (and back), National Institute for Nuclear Physics, INF, Frascati, IT.*
- 04.2023 “Gravitational Wave Memory Beyond General Relativity”. *Gravity Seminar, Department of Physics, University of Virginia, USA.*
- 07.2022 “Cosmological tensions guiding the path beyond Λ CDM - Late time solutions to H_0 and σ_8 ”. *Teilchentee Seminar, Institute for Theoretical Physics, Heidelberg University, DE.*

Selected Conference Presentations and Seminars

- 05.2025 “Gravitational memory as a theory guiding principle”. *NEB-21, Recent Developments in Gravity, Corfu, GRC.*
- 05.2025 “Continuing Isaacson’s legacy: A new perspective on gravitational memory”. *Strong Group Meeting, Copenhagen, DK.*
- 05.2025 “A general metric theory perspective on gravitational memory and the non-linearity of gravity”. *5th Meeting on Gravitational Wave Physics in Scandinavia, Copenhagen, DK.*
- 04.2025 “A general metric theory perspective on gravitational memory and the non-linearity of gravity”. *59th Rencontres de Moriond, Gravitation Session, La Thuile, IT.*
- 03.2025 “An Introduction to Gravitational Memory”. *Lunch Seminar, Institute for Theoretical Physics, University of Bern, CH.*
- 01.2023 “Null Memory Beyond Einstein Gravity - Testing the number of gravitational degrees of freedom”. *Testing Gravity 2023, SFU Harbour Center, Vancouver, CA.*
- 10.2022 “Cosmological tensions guiding the path beyond Λ CDM”. *32nd Midwest Relativity Conference, Oakland University, Rochester, Michigan, USA.*
- 05.2022 “Cosmological tensions guiding the path beyond Λ CDM”. *Atlantic General Relativity Meeting 2022 (online), Memorial University of Newfoundland and Labrador, CA.*
- 09.2021 “Magnetic Monopoles - From Dirac to Grand Unified Theories”. *Theoretical Cosmology Group Seminar, Institute for Theoretical Physics, ETH Zürich, CH.*
- 12.2020 “Foundations of Einstein-Gravity - a QFT perspective”. *Input to General Relativity, Institute for Theoretical Physics, ETH Zürich, CH.*
- 05.2020 “The EFT of Gravity - Derivative Interactions under the Quantum Loupe”. *Theoretical Cosmology Seminar, Institute for Theoretical Physics, ETH Zürich, CH.*

02.2020 “Holographic Duality at Large Charge”. *Theoretical Cosmology Group Seminar, Institute for Theoretical Physics, ETH Zürich, CH.*

Scientific Reviewer

2021 - ongoing Peer reviewing for Phys. Rev. Lett., PRD, Physics Letters B, JCAP, Fortschritte der Physik.

Outreach

02.2022 Invited talk at Collège St-Michel on the physics of the cosmos