

CURRICULUM VITAE 10.10.2022

Jani Kastikainen

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[INSPIRE-HEP Profile](#)

[Personal Website](#)

PERSONAL INFORMATION

Nationality: Finnish

Currently living in: Paris, France

Languages: Finnish (native), English (fluent), French (basic conversation), Swedish (basics)

RESEARCH INTERESTS

AdS/CFT correspondence, two-dimensional conformal field theory, boundaries/defects in quantum field theory and gravity, higher-curvature theories of classical gravity

EDUCATION

Jan. 2019 – Present, PhD in Cotutelle

University: Université Paris Cité (APC laboratory) and University of Helsinki

Doctoral school: ED 560 STEP'UP (Paris) and PAPU (Helsinki)

Supervisors: Francesco Nitti (Paris) and Esko Keski-Vakkuri (Helsinki)

Subject: *Investigations of quantum information and gravity*

Cotutelle established in April 2020

Sep. 2013 – Dec. 2018, Master of Science

University: University of Helsinki (Department of Physics)

Major: Theoretical Physics (grade 5)

Minors: Mathematics (grade 5), Physics (grade 5)

Total average grade: 4.7/5

Master's thesis: *Einstein's equations from entanglement entropy*

TEACHING EXPERIENCE

- Fall 2019: Advanced Statistical Physics, 5 credits, teaching assistant
- Fall 2018 and 2019: Mathematical Methods of Physics III, 10 credits, teaching assistant
- Spring 2018: Basics of Quantum Physics, Fundamentals of Theory of Relativity, 9 credits, teaching assistant

SCHOLARSHIPS AND AWARDS

- Osk. Huttunen Foundation scholarship for post-graduate studies and research in the field of Theoretical Physics at Université Paris Cité, Apr. 2020 - Mar. 2023
- DONASCI travel grant for conference participation every year between 2019 - 2022
- Technology Industries of Finland Centennial Foundation 1000 Euros stipend for a perfect score in the matriculation exam in Mathematics, May 2013

TALKS AND POSTERS

- Sep. 2022: Poster at *Gravity@Prague* on “Flavored ABJM theory on the sphere and holographic F-functions,” Prague (Czech Republic)
- Jul. 2022: Conference poster at *Strings 2022* on “Flavored ABJM theory on the sphere and holographic F-functions,” Vienna (Austria)
- Dec. 2021: HIP seminar talk on “Quantum Information Geometry of Virasoro States,” University of Helsinki (Finland)
- Nov. 2021: Remote journal club talk on “F-Theorem in ABJM Theory With Massive Flavors,” University of Texas (United States)
- Oct. 2021: Contributed conference talk at *Strings, branes and holograms 2021* on “Structure of Holographic BCFT Correlators From Geodesics”, Ascona (Switzerland)
- Dec. 2020: Remote HIP seminar on “Holographic F-functions in ABJM theory with flavor on the 3-sphere,” University of Helsinki (Finland)
- Feb. 2018: Master thesis seminar on “Einstein’s equations from entanglement entropy,” University of Helsinki (Finland)
- In addition, various short talks at *Journée des Doctorants* (APC laboratory) and at *DONASCI Christmas Meeting* (University of Helsinki)

INTERNATIONAL MEETINGS

- Sep. 2022: Gravity@Prague 2022, Prague (Czech Republic)
- Jul. 2022: Strings 2022, Vienna (Austria)
- Apr. 2022: Eurostrings 2022, Lyon (France)
- Feb. 2022: Solvay Workshop on “Selected topics on quantum gravity,” Brussels (Belgium)
- Oct. 2021: Strings, branes and holograms 2021, Ascona (Switzerland)
- Jan. 2020: Nordita Winter School 2020, Stockholm (Sweden)
- Jul. 2019: Strings 2019, Brussels (Belgium)
- Jan. 2019: Nordita Winter School 2019, Stockholm (Sweden)
- Jun. 2018: Quantum Connections Summer School, Stockholm (Sweden)

PUBLICATIONS AND PREPRINTS

- [1] Shovon Biswas, Jani Kastikainen, Sanjit Shashi, and James Sully. “Holographic BCFT Spectra from Brane Mergers” (Sept. 2022). arXiv: [2209.11227](https://arxiv.org/abs/2209.11227)
- [2] Niko Jokela, Jani Kastikainen, Elias Kiritsis, and Francesco Nitti. “Flavored ABJM Theory on the Sphere and Holographic F-functions”. In: *Journal of High Energy Physics* 2022.3 (Mar. 2022), p. 91. ISSN: 1029-8479. arXiv: [2112.08715](https://arxiv.org/abs/2112.08715)
- [3] Jani Kastikainen and Sanjit Shashi. “Structure of Holographic BCFT Correlators from Geodesics”. In: *Physical Review D* 105.4 (Feb. 2022), p. 046007. arXiv: [2109.00079](https://arxiv.org/abs/2109.00079)
- [4] Jan de Boer, Victor Godet, Jani Kastikainen, and Esko Keski-Vakkuri. “Quantum Hypothesis Testing in Many-Body Systems”. In: *SciPost Physics Core* 4.2 (June 2021), p. 019. ISSN: 2666-9366. arXiv: [2007.11711](https://arxiv.org/abs/2007.11711)
- [5] Jani Kastikainen. “Conical Defects and Holography in Topological AdS Gravity”. In: *Classical and Quantum Gravity* 37.19 (Oct. 2020), p. 195010. ISSN: 0264-9381, 1361-6382. arXiv: [2006.02803](https://arxiv.org/abs/2006.02803)
- [6] Jani Kastikainen. “Quasi-Local Energy and ADM Mass in Pure Lovelock Gravity”. In: *Classical and Quantum Gravity* 37.2 (Jan. 2020), p. 025001. ISSN: 0264-9381, 1361-6382. arXiv: [1908.05522](https://arxiv.org/abs/1908.05522)