

Amaury Micheli

RESEARCHER AT IJCLAB, ORSAY AND IAP, PARIS / FRENCH CITIZEN

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Education

“Entanglement and Decoherence in Analogue Gravity experiments and Cosmology”, PhD under the supervision of Jérôme Martin & Scott Robertson

Orsay & Paris, France

IRÈNE JOLIOT-CURIE LABORATORY & INSTITUT D'ASTROPHYSIQUE DE PARIS

2019 - 2023

- Part of the “Cosmology and Quantum Simulation” (COSQUA) project with Chris Westbrook’s team at Institut d’Optique

Master 2 ICFP (International Centre for Fundamental Physics), Theoretical Physics Major

Paris, France

ÉCOLE NORMALE SUPÉRIEURE

2018 - 2019

- Distinction : High Honours

Engineer diploma of École Polytechnique

Palaiseau, France

ÉCOLE POLYTECHNIQUE

2015 - 2018

- Majors : Theoretical Physics and Mathematics
- GPA : 3.94/4

Skills

Programming Python, Mathematica, Jupyter, LaTeX

Languages French, English, Mandarin (Beginner)

Experience

Member of the Scientific and Local Organizing Committee of the international conference “When \hbar meets G .”

Paris, France

INSTITUT D'ASTROPHYSIQUE DE PARIS

August 2021 - July 2022

- Scientific discussions on invited speakers and topics to include.
- Search of sponsors and practical budgeting.

Teaching at University

Orsay, France

UNIVERSITÉ PARIS-SACLAY

September 2019 - September 2023

- Teaching physics in English and French.
- Tutorials for General Relativity & Cosmology (english), Analytical Mechanics (english/french) to 3rd year Bachelors and Geometrical Optics (french) to 1st year Bachelors.
- Practicals and courses of Geometrical Optics to 1st year Bachelors.
- Exercise conception for Analytical Mechanics.

R&D - Internship

Kyoto, Japon

HORIBA

July 2017 - Sept. 2017

- Development of a correction algorithm for an FTIR spectrophotometer.

Assistant Teacher in preparatory class to French engineering schools competitive exam (Bachelor level) - Internship

Montceau-Les-Mines, France

HENRI PARRIAT HIGH SCHOOL

Sept. 2015 - April 2015

- Tutorials for undergraduate and high school students.
- Daily personalized training for students preparing competitive exams.

Honors & Awards

2018 **Medal L.E. Rivot (Quantumness of the cosmological perturbations)**, Internship Prizes, Sciences Physiques et de l’Univers de l’Académie des sciences

Paris, France

2013 **1st Prize (Group “Optical Music”)**, Experimental Physics Olympiads

Paris, France

Talks

”Rethinking beyond the standard model”, Cargèse Summer School

QUANTUM DISCORD AND DECOHERENCE OF INFLATIONARY PERTURBATIONS

Cargèse, Corsica

4th Jun. 2022

”When \hbar meet G”, IAP Colloquium, Paris

QUANTUM DISCORD AND DECOHERENCE OF INFLATIONARY PERTURBATIONS

Paris, France

30th Jun. 2022

IAP’s Astronomy Night 2022

OUTREACH : QUANTUM INFLATION AND DAILY LIFE OF A PHD STUDENT (FRENCH)

Paris, France

4th Jun. 2022

PhD students seminar, IAP

LOOKING FOR QUANTUMNESS IN COSMOLOGICAL PERTURBATIONS

Paris, France

30th Jun. 2022

Asia-Pacific School and Workshop on Gravitation and Cosmology 2022

QUANTUM DISCORD AND DECOHERENCE OF INFLATIONARY PERTURBATIONS

Taipei, Taiwan

20th Mar. 2022

2nd Symposium on Gravitation and Cosmology

QUANTUM DISCORD AND DECOHERENCE OF INFLATIONARY PERTURBATIONS

Chennai, India

3rd Feb. 2022

1st TUG (Theory Universe Gravity) Workshop

QUANTUM DISCORD AND DECOHERENCE OF INFLATIONARY PERTURBATIONS

Paris, France

13th Dec. 2021

PhD students seminar, IAP

ANALOGS OF PAIR PRODUCTION IN COSMOLOGY

Paris, France

5th Feb. 2021

17th Journées de la Matière Condensée

DECOHERENCE IN ANALOGUE PREHEATING EXPERIMENT

Rennes, France

9th Aug. 2021

PPCM Meeting 2019

QUANTUMNESS OF INFLATIONARY COSMOLOGICAL PERTURBATIONS

Paris, France

Jul. 2018