Timothé alezraa

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Education

Ecole normale supérieure Paris-saclay — **Gif-Sur-Yvette**
Eleve normalien, physics department — *2020-2024*

ARTeQ, ENS Paris-Saclay — **Gif-Sur-Yvette**
Training program on quantum technologies, so a mix of quantum mechanics and computer science lectures — *2023-2024*

- **Selected Optional Coursework:** Quantum Information Theory, Quantum matter

NPAC, Université Paris-Saclay — **Orsay,Paris**
2nd year of masters, speciality Nuclei Particles Astroparticles Cosmology — *2022-2023*

- **Selected Optional Coursework:** General relativity, Quark matter physics

M1 Irène Joliot-Curie, Université Paris-Saclay joint with ENS — **Orsay,Gif-sur-yvette**
1st year of masters — *2021-2022*

- **Selected Optional Coursework:** classical and quantum electromagnetism,phase transitions, general relativity and cosmology, stochastic processes

L3 fundamental physics, Université Paris-Saclay joint with ENS — **Orsay,Gif-sur-yvette**
Undergraduate studies — *2020-2021*

CPGE at Lycée Blaise Pascal — **Orsay**
Studies to prepare for national examinations for engineer schools and ENSs — *2018-2020*

Experience

LUTH, Observatoire de Paris — **Meudon, France**
Internship with Micaela Oertel at LUTH Laboratoire Univers et Théorie — *March-June 2023*

- Neutron Stars' equation of state to relate to the Gravitation waves produced by it.
  Relativistic model of neutron star matter. Theory and simulation.

Institute for theoretical physics, TU Berlin — **Berlin, Germany**
Internship with André Eckardt and Alexander Schnell in the Quantum non-Equilibrium Dynamics group — *March-June 2022*

- Quantum statistical dynamics : study of open and dissipative systems, floquet engineering and dynamics of bosonic gases inside a non trivial interacting environment.
  We derive the Lindbladian master equation of the density operator using different approximations that we discuss.

LPNHE, IN2P3 — **Paris, France**
Internship with Nicolas Regnault at LPNHE Laboratoire de Physique Nucléaire et de Hautes Energies — *May-June 2021*

- Data analysis of lightcurves obtained from type Ia supernovaes,
  to improve the magnitude-redshift relation to better constraint cosmological models :
  Development of a new generation of the SALT (Spectral Adaptative Lightcurve Templates) model.

Technical Skills

Languages:French(mother tongue), English(fluent-C2), Spanish(correct)
Developer Tools: Mostly Python, but some basics of C++,Fortran90,SQL,HTML and CSS used in past internships
Technologies/Frameworks: QISKIT,Perceval (for quantum computing)
Trivia: Followed this lecture on Black Holes by Eric Gourgoulhon at ENS