

Vishal Johnson

vishal@mpa-garching.mpg.de vslyo.github.io

Latest version at: vslyo.github.io/cv.pdf

Education

Doctoral studies in Physics

Max-Planck-Institut für Astrophysik, Garching and Ludwig-Maximilians-Universität, München

Apr 2023 - present

Thesis: Quantum and Information

Masters in Physics

Ludwig-Maximilians-Universität, München

Oct 2020 - Apr 2023

Thesis: Quantum Mechanics from an Information Theory Perspective

CGPA: 1.17 (German)

Bachelors in Electrical Engineering and Minor in Physics

Indian Institute of Technology (Indian School of Mines), Dhanbad

Aug 2013 - May 2017

CGPA: 8.48

Research

Publications

- A BRAIN Study to Tackle Image Analysis with Artificial Intelligence in the ALMA 2030 Era doi.org/10.3390/psf2023009018
- Quantum Measurement and Objective Classical Reality doi.org/10.3390/psf2023009016
- Measurement in a Unitary World arXiv:2212.03829v2

Talks and Posters

- Correlation as a Resource DPG Quantum25, Göttingen
- Born rule in Unitary Quantum Mechanics QPL 2025, Varna
- The role of redundant correlated records in the emergence of Objective Classical Reality Foundations 2025, Gdańsk
- When Everett observes Greenberger, Horne, and Zeilinger meeting Wigner's friend QISS 2025, Vienna
- Black Hole and Exoplanet Imaging with Information Field Theory BASP Frontiers 2025, Villars-sur-Ollon
- Quantum Measurement and Objective Classical Reality MaxEnt 2023, Garching

Co-organised Workshops

- M2FINDERS Workshop: Bayesian Imaging Algorithm resolve Workshop II, Bonn

Informal Talks

- Memogenesis IFT Retreat 2025, Schneefernerhaus
- Newcomb's Paradox IFT Retreat 2024, Schneefernerhaus
- Half Average IFT Retreat 2022, Schneefernerhaus

Teaching Experience

Course Organiser for Information Field Theory — Lecturer: Torsten Enßlin

Apr 2024 - present

Tutor for Information Field Theory — Lecturer: Torsten Enßlin

Apr 2022 - Aug 2023

Tutor for Advanced Statistical Physics — Lecturer: Erwin Frey

Apr 2022 - Aug 2022

Teacher of Physics and Mathematics — Plato's Planet, Dubai

Aug 2017 - Oct 2020

Other Skills

Programming: Python, C++, git

Science software: MATLAB, Mathematica, Sagemath

Miscellaneous: Linux, SLURM, L^AT_EX