

Marco Peruzzo

PHD STUDENT

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Experience

University of Padua

TEACHING ASSISTANT

- Course: Control Engineering Laboratory

Padua, Italy

Mar. 2024 - Current

Education

University of Padua

PHD IN INFORMATION ENGINEERING

- Research Topic: Memory effects on classical and quantum networks
- Advisors: Prof. Francesco Ticozzi, Prof. Giacomo Baggio

Padua, Italy

Oct. 2023 - Current

University of Padua

M.SC. IN CONTROL SYSTEMS ENGINEERING

- Thesis: Controllability on networks, influence of structure and memory
- Advisors: Prof. Francesco Ticozzi, Prof. Giacomo Baggio

Padua, Italy

Oct. 2021 - Sep. 2023

University of Padua

B.SC. IN COMPUTER ENGINEERING

- Thesis: Quadcopter modelling and control
- Advisors: Prof. Sandro Zampieri

Padua, Italy

Oct. 2018 - Sep. 2021

I.T.I.F. Severi

HIGH SCHOOL DIPLOMA - COMPUTER SCIENCE AND TELECOMMUNICATION

Padua, Italy

Oct. 2018 - Sep. 2023

Research Interests

My research is currently mainly focused on memory effects on classical and quantum networks. As a side project we are also investigating the use of system-theoretic method for quantum state reconstruction and verification on quantum networks.

I am also working on new kernel-based methods for systems identification with prof. Mattia Zorzi.

Personal Skills

Languages Italian (Mother tongue), English (\approx B2)

Computer skills MATLAB, Simulink, latex, Microsoft office suite, python, c/c++ languages. System identification toolbox and control systems toolbox for MATLAB and Simulink.

Publications

SUBMITTED PAPERS

- “Identification of forward models: a nonparametric approach”, G. Fattore, **M. Peruzzo**, G. Sartori and M. Zorzi, 2024. Submitted.
- “Reconstructing Quantum States from Local Observation: A Dynamical Viewpoint”, **M. Peruzzo**, T. Grigoletto and F. Ticozzi, IEEE Conference on Decision and Control (CDC), Milan, 2024. To appear.
- “A kernel-based PEM estimator for forward models”, G. Fattore, **M. Peruzzo**, G. Sartori and M. Zorzi, IFAC Symposium on System Identification (SYSID), Boston, USA, 2024.
- “Exploring the Impact of Memory on Network Controllability”, **M. Peruzzo**, G. Baggio and F. Ticozzi, European Control Conference (ECC), Stockholm, Sweden, 2024.

Fellowships and Grants

INTERNATIONAL

2023 **Phd scholarship**, University of Padua