Riccardo Gozzi

Karlsruher Institut für Technologie

Karlsruhe, Germany

Personal informations

Address: Via Cugini 10, Reggio Emilia, Italy; Phone number: +393341147780;

Email: ilgozzi@mail.com; Nationality: Italian; Sex: male

Education

- Scientific high school 2006-2011

  Liceo Ariosto Spallanzani, Reggio Emilia, Italy Grade: 100/100

- BSc in Physics 2011-2014

  University of Modena & Reggio Emilia, Italy

- MSc in Theoretical Physics 2014-2016

  University of Bologna, Italy Grade: 110/110 with honors

- PhD in Physics and Mathematics of Information 2017-2022

  Instituto Superior Tecnico, Lisbon, Portugal Grade: Pass with distinction

Grants

- PhD Grant PD/BD/135190/2017 2017

  Obtained from Fundação para a Ciência e a Tecnologia, (FCT)

- Grants JP18H03203 and JP20H05967 2021-2022

  Obtained from JSPS KAKENHI

- Grant ANR-20-CE48-0002-01 2022-2024

  Obtained from ANR Project

- Grant CRC/SFB 1608 2024-Present

  Obtained from Convide

Post-doctoral experiences

- Kyoto University, Kyoto, Japan, 2021-2022
- École Polytechnique / Université Paris-Est Créteil Val de Marne (UPEC), Paris, France 2022-2024
- Karlsruher Institut für Technologie, Karlsruhe, Germany 2024-Present

Publications

Journals:

- Title: Kraus operators and symmetric groups; Authors: A.Cattabriga, E.Ercolessi, R.Gozzi, E.Meucci; Journal: International Journal of Geometric Methods in Modern Physics, 2150142; Year: 2021
- Title: Characterizing time computational complexity classes with polynomial differential equation; Authors: R.Gozzi, D.Graça; Journal: Computability vol. 12, no. 1, pp. 23-57, 2023; Year: 2023
- Title: A continuous characterization of PSPACE using polynomial ordinary differential equations; Authors: O.Bournez, R.Gozzi, D.Graça, A. Pouly; Journal: Journal of Complexity: 101755; Year: 2023
- Title: Set descriptive complexity of solvable functions; Authors: R.Gozzi, O.Bournez; Journal:Computability vol.14, no. 1; Year: 2025

Conferences with a selecting committee:

- Title: Using differential equations to characterize complexity classes; Location: virtual (originally planned for Faro, Portugal); Conference: Continuity, Computability, Constructivity; Year: 2020
- Title: Analog characterization of complexity classes; Location: virtual; Conference: Computability and Complexity in Analysis; Year: 2021
- Title: Discontinuous IVPs with unique solutions; Location: Dubrovnik, Croatia; Conference: Computability and Complexity in Analysis; Year: 2023
- Title: Discontinuous IVPs with unique solutions; Location: Kyoto, Japan; Conference: Continuity, Computability, Constructivity; Year: 2023
- Title:Solving discontinuous initial value problems with unique solutions is equivalent to computing over the transfinite; Authors: O.Bournez and R.Gozzi; Location: Clermont-Ferrand; Conference: 41st International Symposium on Theoretical Aspects of Computer Science (STACS); Year: 2024
- Title: Set descriptive complexity of solvable functions; Location: Nice, France; Conference: Continuity, Computability, Constructivity; Year: 2024

In preparation and/or submitted:

- Title: Complexity of computing the complex square root on connected domains; Authors: A.Kawamura and R.Gozzi.
- Title: Solvable Initial Value Problems Ruled by Discontinuous Ordinary Differential Equations; Authors: O.Bournez and R.Gozzi.

Theses

- Title:Open dynamics of su (3) quantum systems; Authors:E.Ercolessi and R.Gozzi; Link: http://amslaurea.unibo.it/id/eprint/12395
- Title: Analog characterization of complexity classes; Authors: R.Gozzi; Citation: Gozzi, Riccardo, and Daniel Graça. *Analog characterization of complexity classes*. Diss. Ph. D. thesis, Instituto Superior Técnico, Lisbon, Portugal and University of Algarve, Faro, Portugal, 2022.

Teaching experiences

- Supply teacher for primary school "Marco Emilio Lepido", Reggio Emilia, Italy, 22/02/2017 - 28/02/2017
- Supply teacher for the primary school "Don Pasquino Borghi", Reggio Emilia, Italy, 24/04/2017 - 10/06/2017