Curriculum Vitae Carlo Mariconda



### PERSONAL INFORMATION

# (2cmk-1)

# Carlo Mariconda

Dipartimento di Matematica, via Trieste 63, 30121, Padova, Italy

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http://www.math.unipd.it/~maricond

Sex Male | Date of birth XXXXXX | Nationality Italian | F.C.

WORK EXPERIENCE

2017-2021 2022 - present Advisor of the University of Padova for e-learning and Innovative Teaching Advisor of the University of Padova for digital education

Counceling E-learning

2018- present

**Change Agent Unipd** 

E-learning

2016-2021

# Lead Educator in Moocs

Platforms Eduopen and Futurelearn

- Mooc "Precalcolo" Eduopen, 2016
- Mooc "Precalculus" Futurelearn, 2017
- Mooc "Advanced precalculus" Futurelearn, 2018
- Mooc "Matematica di base" Federica weblearning & CISIA (140 000 students), 2025
- Mooc "Analisi Matematica in più variabili" Federica weblearning, 2020
- Mooc "Combinatorics: Methods for counting" Futurelearn, 2021
- Mooc: "Introduzione alle probabilità" Futurelearn, 2024

E-learning, distance learning

2012-2023

# Coordinator of the commission in New technologies for teaching

Dipartimento di Matematica, Università degli Studi di Padova

E-learning

1998 - present

# Associate/Full (from 2022) Professor of Mathematical Analysis

Università degli Studi di Padova

 Research and Teaching several courses in Mathematical Analysis and Probabilities Mathematics

1992-1998

### Assistant Professor in Mathematical Analysis

Università degli Studi di Padova

 Research and Teaching Mathematics Curriculum Vitae Carlo Mariconda



#### **EDUCATION AND TRAINING**

# 2017-2021 Open Badges

- 2017 "Teaching4Learning", https://bestr.it/verify/EPYW6PTXRC
- 2018 Lead Educator in Moocs. https://bestr.it/verify/9KSGIN8A9P
- 2019 Change agent https://bestr.it/verify/D0MOFFS6A0
- 2020: "Design Learning Innovation"
  - https://www.pok.polimi.it/certificates/1db95b8c0b5749ffbe1807c2c289a67e
- 2021- Theory and Crypthography", University of California San Diego. https://www.coursera.org/account/accomplishments/verify/FXES7TAVC7RD
- 2021: "More fun with prime numbers" University of Kyoto. https://courses.edx.org/certificates/efd1f4992b924c6d8f4cb2db27983b4b
- 2023 Blended teaching,
  - https://openbadges.bestr.it/public/assertions/oYzvFWUwSY-cAlOVKPIGFg
- 2023- Smart learning Design, POK Polimi https://www.pok.polimi.it/certificates/e5a107b977ba4efc8e5df5619dcec204
- 2024 Teaching4Learning@Unipd Faculty Development Trainer https://openbadges.bestr.it/public/assertions/bgtX\_REYR9qFlvkdnBCQow
- 2025 Imparare con l'IA POK Polimi https://app.myopenbadge.com/verify/Nf3HgYTX

#### 1987-1992

# Ph.D. in Functional Analysis

International School for Advanced Studies (I.S.A.S.-S.I.S.S.A.), Trieste, Italy

# 1982-1987 Degree in Mathematics

Università degli Studi di Padova, Italy

# TEACHING ACTIVITY 1992- present

# University of Padova

- Courses in mathematical Analysis, Calculus of Variations, Combinatorics, Probability, for the Schools of Natural Sciences and Engineering of the University of Padova (about 60 courses).
- Several Ph. D. courses in Evora (Portugal) and University of Padova (Mathematics)
- From 2021, teaching Precalculus in the online degree in techniques and methods in Psychological Sciences and blended course in Analysis and Probabilities (school of Engineering)
- From 2023: course in Cryptography (Master Course in Cybersecurity/Mathematics)

# SCIENTIFIC ACTIVITIES

## Research topics

Calculus of Variations, Control theory, Functional Analysis, Measure theory. My recent interests concern Lipschitz regularity for the basic problem of the calculus of variations, the Du Bois-Reymond equation, the avoidance of the Lavrentiev phenomenon in the one dimensional and multidimensional

scalar case.

# Recent Talks and seminars

- September 2017: invited speaker at the congress "Control of State Constrained Dynamical Systems", Padova.
- February 6-10, 2017: Invited speaker at the XXVII National Congress of Calculus of Variations, Levico Terme (Trento), Italy.
- 10-14 July 2017: invited speaker at SIAM annual meeting in Pittsburgh, USA
- 25-29 September 2017: invited speaker at the congress "Control of State Constrained Dynamical Systems", Padova.
- 5-9 July 2018: invited speaker at the AIMS Conference Series ion Dynamical systems and differential equations. Taipei (Taiwan)
- November 30, 2018: Invited speaker at the "Workshop day on Mathematics in memory of Vladimir Goncharov", Evora (Portugal)
- February 4-8, 2019: Invited speaker at the XXIX National Congress of Calculus of Variations, Levico Terme (Trento), Italy
- February 2019, XXIX National Congress of Calculus of Variations, Levico Terme (Trento)
- July 2019, ICIAM, Valencia (Spain)
- July 15-19, 2019: Invited speaker at ICIAM, Valencia (Spain)
- June 5-9, 2020: Invited speaker at the 13th AIMS International Conference on Dynamical Systems and Differential Equations will take place in Atlanta, GA, USA (suspended for COVID)
- October 7, 2020: invited speaker at the University of Bologna (Invites Prof. Cupini)
- June 11, 2021: seminar at University of Padova, invited by Prof. Franco Rampazzo
- May 2022, Porto congress FGP Optimization
- June 2023, Seminar at UBO, Brest
- June 2024, Seminar at UBO, Brest

# Conferences and workshops (organizer)

- 2006: member of the organizing commettee of the Congress "Variational and Differential Problems with constraints. Conference in honor of Arrigo Cellina on the occasion of his 65<sup>th</sup> birthday" Venezia, September 18-20:
- 2011: member of the organizing commettee of the Congress "Nonlinear differential equations and control: celebrating Arrigo Cellina's 70<sup>th</sup> birthday"—Milan, September 22-23;
- Organization of several Ph. D. courses at the Scuola di Dottorato in Matematica of the University of Padova: P. Pedregal (Young measures), S. Solimini (2 courses: Mumford-Shah/irrigation problems), F. Clarke (Calculus of variations and Optimal Control), M. Quincampoix.
- 2014: Organization of a course in calculus of variations at Scuola Galileiana in Padova, teachers: F. Clarke, B. Piccoli.
- 2022: Organizer of a minisymposium FRENCH GERMAN PORTUGUESE CONFERENCE ON OPTIMIZATION 2022

# Visiting Professor

- 2015-2023: Visiting professor at the Ecole Normale Supérieure, Paris for a total of 3 months (invited by Prof. R. Cerf)
- 2015-2024: Several times visiting professor at the Department of mathematics at the University of Brest UBO for a total of 3 months (invited by Prof. P. Bettiol)

# DEVELOPMENT OF NEW TOOLS FOR TEACHING & LEARNING

#### BoardOnAir™

 2017-18: Development of the glass board system <u>BoardOnAir</u> that enables recording videos without the need of post-production. (EUIPO European Union Intellectual Property Office No 017651548)