Curriculum Vitae

Personal information

Name / Surname Personal Email Nationality

Gender

Scientific interests

Casalvieri, Christian

Italian

Physics, Pure and Applied mathematics, Space Science, Didactics of Mathematics, Scientific Dissemination

Education and training

Dates

Title of qualification awarded Name and type of organization providing education and training

Dates

Title of qualification awarded
Thesis title

Name and type of organization providing education and training

Dates

Title of qualification awarded Name and type of organization providing education and training

Dates
Title of qualification
Thesis title

Name and type of organization providing education and training

July 1992

High school leaving qualification in scientific studies, grade 60/60 Liceo Scientifico Talete, Rome, Italy

May 2005

Master of science in Physics, grade 110/110

"Tidal coupling effects on gravitational radiation emission in binary systems" under the supervision of Prof. Valeria Ferrari

Università degli Studi di Roma 'Sapienza', Rome, Italy

2019

Appointment as Expert in Mathematical Analysis Università degli Studi di Roma 'Sapienza', Rome, Italy

May 2023

PhD in Mathematical Models for Engineering, Electromagnetism and Nanoscience

"Graphical recognition of the properties of derivatives and anti-derivatives: analysis of different strategies using an eye-tracker" under the supervision of Prof. Alessandro Gambini

Department of Basic and Applied Engineering Sciences - Università degli Studi di Roma 'Sapienza', Rome, Italy

Principal publications

- 1) Casalvieri C., Ferrari V., Stavridis A., Gravitational signals due to tidal interactions between white dwarfs and black holes, MNRAS 365, 3, 929 (2006)
- 2) Casalvieri C., De Cicco V., 'Esercizi di Analisi Matematica II in campo reale ed in campo complesso', Ed. LaDotta, 2017
- 3) Capone, R., Casalvieri, C., Gambini, A., Spagnolo, C., 'L'Eye-tracking e le prove INVALSI: uno studio idiografico sui processi risolutivi di quesiti di Matematica'. In "I dati Invalsi: uno strumento per la ricerca", Franco Angeli, 2021
- 4) Capone, R., Casalvieri, C., Ferretti, F., Gambini, A., Spagnolo, C., 'Which strategies do students adopt when reading a text containing a mathematical problem? Initial results of an exploratory study with eye-tracking', In: QUADERNI DI RICERCA IN DIDATTICA. ISSN 1592-4424 (2022), pp. 1-13
- 5) Casalvieri, C., Gambini, A., Analysis of the solution of a Cauchy Problem using an Eye-Tracker, THE INTERNATIONAL JOURNAL FOR TECHNOLOGY IN MATHEMATICS EDUCATION, ISSN 1744-2710. 29:4(2022), pp. 189-199

- 6) Casalvieri, C., Gambini, A., Viola, G., 'The concept of derivatives through eye-tracker analysis', PROCEEDINGS OF CSEDU 2023 Volume 2 (978-989-758-641-5), Prague, Czech Republic
- 7) Spagnolo, C., Casalvieri, C., Gambini, A. (2024). Different Processes for Graphical Recognition of Derivative of a Function: An Eye-Tracker Analysis. In: Yang, XS., Sherratt, S., Dey, N., Joshi, A. (eds) PROCEDINGS OF NINTH INTERNATIONAL CONGRESS ON INFORMATION AND COMMUNICATION TECHNOLOGY. ICICT 2024 2024. Lecture Notes in Networks and Systems, vol 1000. Springer, Singapore. https://doi.org/10.1007/978-981-97-3289-044
- 8) Casalvieri, C., Gambini, A., Spagnolo, C., Viola, G. (2024). Graphical Recognition of Antiderivatives: Analysis of Different Strategies Reflecting Level of Expertise Using Eye-Tracker Tool. In CSEDU (1) (pp. 202-215)

Language skills

Mother tongue Other language(s) Self-assessment

European level(*)

English

Italian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1 Proficient User	C1 Proficient User	B2 Proficient User	B2 Proficient User	C1 Proficient User

^(*) Common European Framework of Reference (CEF) level

Computer skills and competences

- Good knowledge of Windows operating systems and Office software
- Good knowledge of LateX language
- Basic Fortran, Basic Matlab programming skills

Teaching skills and competences

Dates

 $\textbf{2008} \rightarrow \textbf{2010}$

Tutor in Mathematical Analysis I at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Management Engineering.

Dates

 $2010 \rightarrow 2014$

⁻ Adjunct professor in Mathematical Analysis I at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Management Engineering.

Dates

 $2014 \rightarrow 2016$

- Adjunct professor in Mathematical Analysis I at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Aerospace Engineering.

Dates

 $2010 \rightarrow 2018$ and since 2023

- Adjunct professor in Mathematical Analysis II at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Aerospace Engineering.

Dates

 $2015 \to 2018$

- Adjunct professor in Mathematical Analysis II at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Clinical Engineering.

Dates

 $2016 \rightarrow 2017$ and since 2023

- Adjunct professor in Mathematical Analysis I at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Energy Engineering.

Dates

 $2017 \rightarrow 2018$

- Adjunct professor in Mathematical Analysis I at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Building Engineering Architecture.

Dates

 $2019 \rightarrow 2020$

-Tutor in Mathematics at the Latina campus of the Faculty of Economics at the University of Rome 'Sapienza'.

Dates

 $2018 \to 2022$

-Tutor in Mathematical Analysis I at the Faculty of Engineering, University of Rome 'Sapienza', degree course in Energy Engineering.

Dates

since 2017

-Creator of the database of questions assigned to AEOs (Additional Educational Obligations) and selector of Advanced Course Mathematics tests for the Faculty of Civil and Industrial Engineering.

Dates

since 2023

- INVALSI math test coder at the national level and ICILS test coder at the international level.

Dates

November 2023 \rightarrow July 2024

- Collaboration grant with the University of Rome 'Sapienza' for the organisation and updating of OFA tests, mathematics pre-courses and self-assessment tests in Mathematical Analysis, Linear Algebra and Geometry.

Social skills and competences

-Good capacity of adapting myself to socially variegated sectors and of communication due to my cultural training.

Organisational skills and competences

-Good experience in conducting projects and groups, due either to training's activity in University.

Other skills and competences

-Among my hobbies I specially prefer: reading, playing chess, walking in nature and every outdoors activity.