### Curriculum Vitae

#### Personal information

Name / Surname

Personal Email

Nationality

Gender

Scientific interests

### Casalvieri, Christian

ccasalv@fastwebnet.it

Italian

Male

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

- 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

es | May 2023

PhD in Didactics of Mathematics

"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

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

<sup>(\*)</sup> 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

 $2008 \rightarrow 2010$ 

- 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** 

 $2010 \to 2018$ 

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

**Dates** 

 $2015 \rightarrow 2018$ 

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

**Dates** 

 $2016 \rightarrow 2017$ 

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

**Dates** 

 $2017 \to 2018$ 

- 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** 

2023

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

Dates

December 2023 → June 2024

- Collaboration grant for the organisation and updating of OFA tests, mathematics precourses and self-assessment tests in Mathematical Analysis 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.