

# Curriculum vitae: Alessandro Bisio

## Personal Information

Name: **Alessandro**  
Surname: **Bisio**  
Date of Birth: November 23, 1982  
Place of Birth: Tortona (AL)  
Address: Strada Provinciale Pozzolo Formigaro, 42  
15057 Rivalta Scrivia (AL), Italia  
Phone number: 333 8009527  
Email: alessandro.bisio@unipv.it

## Education

2007–present PhD student at Università di Pavia  
2007 Second Degree at Università di Pavia, supervisor Prof. Giacomo M. D’Ariano, thesis on “A game theoretical approach to Quantum Coin Flipping”, grade: 110/110 cum laude  
2004 First Degree at Università di Pavia, supervisor Dott. Oreste Nicrosini, thesis on “Modelli stocastici in finanza”, grade: 110/110 cum laude  
2001–2006 Fellow of the “Almo Collegio Borromeo”  
2001–2006 Fellow of the “IUSS”

## Research interests

Quantum Information, Foundations of Quantum Mechanics, Quantum Optics, Quantum Computing Physics.

## Other activities

- 2009–2010 Teaching assistant for the courses “Fisica I con laboratorio” (First Degree Course in Chemistry) and “Meccanica Razionale e Analitica” (First Degree Course in Physics)

- 2009–2010 Tutor for the projects “Adeguamento delle conoscenze matematiche di base” (First Degree Course in Nursing) and “Meccanica Analitica e Meccanica Quantistica” (First Degree Course in Physics)
- 2009 *Cultore della materia* for the courses “Teoria Fisica dell’Informazione” (Quantum Information), “Fondamenti della Meccanica Quantistica” (Foundations of Quantum Mechanics) and “Ottica Quantistica” (Quantum Optics)
- 2008–2009 Tutor for the project “Adeguamento delle conoscenze matematiche di base” (First Degree Course in Nursing)

## Publications

A. Bisio, G. Chiribella, G. M. D’Ariano and P. Perinotti, *Information-Disturbance Tradeoff in estimating a unitary transformation*, Phys. Rev. A **82**, 062305 (2010).

A. Bisio, G. Chiribella, G. M. D’Ariano and P. Perinotti, *Minimal computational-space implementation of multi-round quantum protocols*, arXiv:1006.1780

A. Bisio, G. Chiribella, G. M. D’Ariano, S. Facchini and P. Perinotti, *Optimal quantum learning of a unitary transformation*, Phys. Rev. A **81**, 032324 (2010)

A. Bisio, G. Chiribella, G. M. D’Ariano, S. Facchini and P. Perinotti, *Optimal Quantum Tomography*, IEEE Journal of Selected Topics in Quantum Electronics **15**, 1646 (2009).

A. Bisio, G. Chiribella, G. M. D’Ariano, S. Facchini and P. Perinotti, *Optimal Quantum Tomography for States, Measurements and Transformations*, Phys. Rev. Lett. **102**, 010404 (2009).

## Talks and seminars

“Optimization of Quantum Circuits” CEQIP Workshop, Valtice, 3-6 June 2010

“Quantum Circuits Optimization” invited talk at Slovak Academy of Sciences, Bratislava, 8 June 2010

Autorizzo il trattamento dei dati personali ai sensi dell’art. 7 del D. Lgs. 196/2003