

Elisa Iacomini

PERSONAL DATA

DATE AND PLACE OF BIRTH: November 26, 1991, Tarquinia (VT), Italy
ADDRESS: Via A. Scarpa 16, 00161 Rome, Italy
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EDUCATION

2016-2019 **PhD in Mathematical Modeling for Engineering**,
"La Sapienza" University,
Dipartimento di Scienze di Base e Applicate per l'Ingegneria (SBAI), Rome.

SUPERVISORS: F. Camilli (SBAI), E. Cristiani (IAC-CNR)

RESEARCH TOPICS:

Numerical methods for hyperbolic problems

Traffic flow modeling

Wasserstein distance

Sensitivity analysis for numerical methods

Optimal transport problem

JULY 2016 **Master Degree in Applied Mathematics**

FINAL MARK: 110/110 cum laude

THESIS TITLE: Un approccio numerico alla quantificazione dell'incertezza
per modelli di traffico veicolare su grandi reti

SUPERVISORS: M. Falcone, E. Cristiani (IAC-CNR)

OCTOBER 2013 **Bachelor Degree in Mathematics**

FINAL MARK: 108/110

THESIS TITLE: Alcuni metodi di ottimizzazione per problemi multiobiettivo

SUPERVISOR: M. Falcone

JULY 2010 **High school degree**

FINAL MARK: 100/100

Liceo Scientifico "P. Ruffini", Viterbo, Italy

PUBLICATIONS

- [1] F. Camilli, R. De Maio, E. Iacomini,
A Hopf-Lax formula for Hamilton-Jacobi equations with Caputo time derivative,
preprint on arXiv:1803.09296.
- [2] M. Briani, E. Cristiani, E. Iacomini,
Sensitivity analysis of the LWR model for traffic forecast on large networks using Wasserstein distance,
Comm. in Math. Sci., **16** (2018), 123–144.

SPEAKER

- Apr 17, 2018 POSTER SESSION
Title: *Sensitivity analysis of the LWR model for traffic forecast on large networks using Wasserstein distance*
NUMERICAL ASPECTS OF HYPERBOLIC BALANCE LAWS AND RELATED PROBLEMS,
Auditorium Santa Lucia, University of Ferrara.
- Nov 14, 2017 SEMINARIO DI MODELLISTICA DIFFERENZIALE NUMERICA
Title: *Sensitivity analysis of the LWR model for traffic forecast on large networks using Wasserstein distance*
Mathematics Department 'Guido Castelnuovo', La Sapienza University of Rome.

ACTIVITIES, SUMMER-SCHOOLS AND WORKSHOPS

School on Optimal Transport: Numerical methods and applications

May 7-11, 2018, Lake Como School of Advanced Studies (*with financial support*), Como.

NumAsp2018: Numerical Aspects of Hyperbolic Balance Laws and Related Problems

April 16-20, 2018, Università di Ferrara (*with financial support*), Ferrara.

Advanced Graphics for Scientific Data

Feb, 2018, Physics and Mathematics Department, Roma Tre University, Rome.

IperPV2017: XVII Italian Meeting on Hyperbolic Equations

Sept 6-8, 2017, Pavia.

Summer School: Data-Driven Methods for Multi-Scale Physics and Complex Systems

July 24-28, 2017, Rome.

Introduction to Parallel Computing with MPI and OpenMPI

May 29-31, 2017, CINECA, Rome.

Summer School: Frontiers in Partial Differential Equations Analysis and Solvers

May 22-25, 2017, (*with financial support*), Pavia.

School on Uncertainty Quantification for Hyperbolic Equations and Related Topics

April 24-28, 2017, GSSI (*with financial support*), L'Aquila.

Indam Workshop: Transport Modeling and Management: Vehicles and Crowds

March 6-10, 2017, Rome, in the framework of the INDAM-CNR project MATHTECH.

Indam Workshop PDE Models for Multi-Agent Phenomena
Nov 28-Dec 3, 2016, Rome

TEACHING

2017-2018 **Tutor of Analisi I (SSD MAT/05)**
Ingegneria Chimica, Sapienza Università di Roma.
Teacher: Prof. T. Leonori.

2017-2018 **Tutor of Analisi I (SSD MAT/05)**
Ingegneria Informatica, Sapienza Università di Roma.
Teacher: Prof. F. Camilli.

LANGUAGES

ENGLISH: B2
FRENCH: Basic Knowledge (A1)

COMPUTER SKILLS

PROGRAMMING LANGUAGE: C++, Matlab, FreeFEM.
OTHER KNOWLEDGE: L^AT_EX, PowerPoint, Excel, Word, Paraview.