



Roberta Bianchini

Personal Data

Name, S. **Roberta Bianchini.**
Nationality **Italian.**
Date of birth **March 8th, 1990.**
Place of birth **Anzio, Rome, Italy.**

Positions

April 2020 - **Researcher, Istituto per le Applicazioni del Calcolo Mauro Picone (IAC).**
National Research Council (CNR), Rome, Italy.
Nov. 2019 - **Postdoc (FSMP), LJLL, Paris, France.**
March 2020 Supervisor: Anne-Laure Dalibard.
July 2019 - **Postdoc (ERC grant BLOC), LJLL, Paris, France.**
Oct. 2019 Supervisor: Anne-Laure Dalibard.
Jan. 2018 - **Postdoc, UMPA, ENS Lyon, France.**
June 2019 Supervisor: Laure Saint-Raymond.

Education, Titles

Feb. 2019 **French Qualification, Assistant Professor (Maître de Conférences), Section 26**
(*Mathématiques appliquées et applications des mathématiques*).
Jan. 2019 **French Qualification, Assistant Professor (Maître de Conférences), Section 25**
(*Mathématiques*).
Nov. 2014 – **PhD in PDEs and Fluid Mechanics, University of Rome "Tor Vergata" and Italian**
Nov. 2017 *National Research Council.*
Thesis defence: December 15th, 2017, University of Rome "Tor Vergata".
Title: "Advanced energy methods in Fluid Mechanics".
Advisor: Roberto Natalini (IAC-CNR, Rome).
Referees: Jean-Yves Chemin (UMPC, Paris), Paolo Secchi (University of Brescia).
Committee: Jean-Yves Chemin, Roberto Natalini, Enrique Zuazua (DeustoTech, Bilbao and UAM, Madrid).
Oct. 2012 – **Master Degree in Applied Mathematics, "Sapienza" University of Rome .**
July 2014 Thesis: "Applicazioni della teoria dei sistemi iperbolici dissipativi ad alcuni modelli matematici per biofilms". Supervisors: Roberto Natalini (IAC-CNR(Rome)), Piero D'Ancona ("Sapienza" University of Rome). Final mark: 110/110 cum laude.

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- June 2014 **Excellence Diploma for Master Degree in Applied Mathematics**, "Sapienza" University of Rome .
- Oct. 2009 – **Bachelor Degree in Mathematics**, "Sapienza" University of Rome.
- July 2012 Thesis: "Il teorema della curva di Jordan". Supervisor: Piero D'Ancona ("Sapienza" University of Rome). Final mark: 110/110 cum laude.
- June 2012 **Excellence Diploma for Bachelor Degree in Mathematics**, "Sapienza" University of Rome .
- Sept. 2004 – **High School Degree**, Liceo Scientifico "Innocenzo XII", Anzio, Rome.
- July 2009 Final mark: 100/100.
- Aug. 2008 **Summer School**, (*funded student*), Scuola Normale Superiore di Pisa, Italy.

Awards

- January 2021 **ICERM Invitation for Visiting**, Fall 2021, Brown University.
- January 2021 **International Exchanges Grant 2020, funded by the Royal Society**, co-leader, with Michele Coti Zelati (Imperial College, UK).
- Sept 2020 **CNR Short Term Mobility Grant**, CNR, Italy.
- March 2020 **GNAMPA grant 2020**, group leader, INdAM.
- January 2020 **MSRI Research Membership Grant**, researcher in the program Mathematical problems in fluid dynamics, Berkeley, California.
- Nov. 2019 **Permanent Researcher at CNR**, IAC, Rome.
- Jan. 2019 **Postdoc grant FSMP**, LJLL, Paris.
- Oct. 2014 **PhD grant**, "Tor Vergata" University of Rome.
- Oct. 2013 **Excellence Class for Master Degree in Applied Mathematics**, "Sapienza" University of Rome.
- Oct. 2010 **Excellence Class for Bachelor Degree in Mathematics**, "Sapienza" University of Rome.

Teaching

- Oct. 2017 – **Teaching Assistant - Mathematical Analysis**, University of Rome "Roma 3".
Dec. 2017
- Nov. 2016 – **Teaching Assistant - Mathematical Analysis**, University of Rome "Roma 3".
Feb. 2017
- Nov. 2015 – **Teaching Assistant - Mathematical Analysis**, University of Rome "Roma 3".
Feb. 2016
- Jan. 2014 – **Collaborator**, "Sapienza" University of Rome .
June 2014 Role of assistant with computer skills.

Scientific Activity

Research

Research Field **Mathematical Analysis and Applied Mathematics.**

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Research Topics **Partial Differential Equations: Hyperbolic Partial Differential Equations, Fluid-Dynamics Models, Relaxation Systems.**
Problems **Hydrodynamic stability, asymptotic behaviour, Fourier analysis with para-differential techniques, analysis of boundary layers, singular limits, fluid dynamics, well-balanced numerical schemes, kinetic theory, BGK models.**

Publications

Submitted to a journal

- [17] J. Bedrossian, R. Bianchini, M. Coti Zelati, M. Dolce, Nonlinear inviscid damping and shear-buoyancy instability in the two-dimensional Boussinesq equations. preprint arXiv:2103.13713v1.
- [16] R. Bianchini, C. Perrin, Soft congestion approximation to the one-dimensional constrained Euler equations, preprint arXiv 2005.13214 (2020).
- [15] R. Bianchini, R. Natalini, Nonresonant bilinear forms for partially dissipative hyperbolic systems violating the Shizuta-Kawashima condition, preprint arXiv:1906.02767 (2019).

Published or accepted

- [14] R. Bianchini, R. Natalini, Asymptotic behavior of 2D stably stratified fluids with a damping term in the velocity equation, *ESAIM: COCV*, in press; preprint arXiv:2009.01578 (2020).
- [13] R. Bianchini, A.-L. Dalibard One-dimensional turbulence with Burgers, *Fluid Dynamics, Dispersive Perturbations and Quantum Fluids, Springer UMI Series* (2021), in press; preprint arXiv: arXiv:2004.02825.
- [12] R. Bianchini, G. Staffilani, Revisitation of a Tartar's result on a semilinear hyperbolic system with null condition, *Fluid Dynamics, Dispersive Perturbations and Quantum Fluids, Springer UMI Series* (2021), in press; preprint arXiv: arXiv:2001.03688.
- [11] R. Bianchini, M. Coti Zelati, M. Dolce, Linear inviscid damping for shear flows near Couette in the 2D stably stratified regime, *Indiana University Math. Journal*, in press; preprint arXiv 2005.09058 (2020).
- [10] R. Bianchini, Relative entropy in diffusive relaxation for a class of discrete velocities BGK models, *Communications in Mathematical Sciences*, **19** (1) (2021), 39-54. Available at arXiv:1912.10988 (2019).
- [9] R. Bianchini, A.-L. Dalibard, L. Saint-Raymond, Near-critical reflection of internal waves, *Analysis and PDE* **14** (1) (2021), 205-249. DOI 10.2140/apde.2021.14.205. Available at arXiv:1902.06669.
- [8] R. Bianchini, Strong convergence of a vector-BGK model to the incompressible Navier-Stokes equations, to appear on *Journal des Mathématiques Pures et Appliquées* **132** (2019), 280-307.
- [7] R. Bianchini, L. Gosse, E. Zuazua, A two-dimensional "flea on the elephant" phenomenon and its numerical visualization, *Multiscale Modeling & Simulation* **17** (1) (2019) , 137-166.
- [6] R. Bianchini, L. Gosse, A "truly-two dimensional" discretization of drift-diffusion equations on Cartesian grid *SIAM J. Numer. Anal.*, **56** (5)(2018), 2845-2870.

- [5] R. Bianchini, Uniform asymptotic and convergence estimates for the Jin-Xin model under the diffusion scaling, *SIAM Journal on Mathematical Analysis* **50** (2) (2018), 1877-1899.
- [4] R. Bianchini, R. Natalini, Convergence of a vector-BGK approximation for the incompressible Navier-Stokes equations, *Kinetic and Related Models* **12** (1)(2019), 133-158.
- [3] R. Bianchini, R. Natalini, The paradifferential approach to the local well-posedness of some problems in mixture theory, *Comm. Part. Diff. Eqs.* **43** (7) (2019), 1051-1072, <https://doi.org/10.1080/03605302.2018.1499775> .
- [2] R. Bianchini, R. Natalini, Well-posedness of a model of nonhomogeneous compressible-incompressible fluids, *J. Hyp. Diff. Eq.* **14** (3) (2017), 487-516.
- [1] R. Bianchini, R. Natalini, Global existence and asymptotic stability of smooth solutions to a fluid dynamics model of biofilms in one space dimension, *J. Math. Anal. Appl.* **434** (2016), 1909-1923.

Funding/Long-term projects

- Co-leader (with Michele Coti Zelati, Imperial College) of the International Exchanges Grant 2020 (funded by the Royal Society).
- STM 2020, Short Term Mobility CNR.
- MSRI Research Member in the program *Mathematical problems in fluid dynamics - January 19 to May 28, 2021 at MSRI, Berkeley, California*, organized by: Thomas Alazard, Hajer Bhourri, Mihaela Ifrim, Igor Kukavica, David Lannes, Daniel Tataru. <https://www.msri.org/programs/327>.
- Leader of the GNAMPA (INdAM) project 2020 *Sistemi di EDP parzialmente dissipativi: aspetti teorici per sistemi iperbolici, applicazioni alla biologia e modelli di uidodinamica*, with Fabio Ancona, Giorgia Ciavolella, Michele Coti Zelati, Francesca Guarguaglini, Marta Marulli, Roberto Natalini.
- Participant of the GNAMPA (INdAM) project 2019 *Partially dissipative hyperbolic systems and applications to biological models*, with Fabio Ancona, Francesca Guarguaglini, Marta Menci, Roberto Natalini (group leader), Marco Papi, Flavia Smarrazzo.
- Junior Trimester in Kinetic Theory, Hausdorff Research Institute for Mathematics (HIM) in Bonn, Germany, May-August 2018. Selected and funded research project in collaboration with Serena Cenatiempo (GSSI, L'Aquila, Italy), Lingbing He (Tsinghua University, Beijing, P.R. China), Chiara Saffirio (Zurich, Switzerland), Sergio Simonella (ENS Lyon, France).
- <https://www.him.uni-bonn.de/de/programs/past-programs/past-junior-trimester-programs/kinetic-theory-2019/description/>
- Scientific collaboration CNR (Italy) - CNRS (France) 2015-2017, PICS Project.

Invited talks at international/national conferences

- Feb. 2021, **Applied Seminar, MSRI Fluid Dynamics Trimester**, Berkeley, US (online). *Organizers*: Didier Bresch and David Lannes.
 - Feb. 2021, **Hyperbolic Balance Laws: modeling, analysis, and numerics**, Oberwolfach Workshop, Germany. *Organizers*: Remi Abgrall, Mauro Garavello, Maria Lukacova, Konstantina Trivisa.
 - Nov. 2020, **Turb1d 2020**, online.
Organizers: Rafael Granero Belinchón and Francesco Fanelli.
 - Nov. 2020, **Control Methods in Hyperbolic Partial Differential Equations**, Oberwolfach Workshop, Germany. *Organizers*: Fabio Ancona, Bani Anvari, Olivier Glass, Michael Herty.
 - Sept. 2020 (postponed due to the pandemic), **Analysis, control, and numerics for PDE models of interest to physical and life sciences**, LIA COPDESC conference, Erice, Sicily, Italy.
Organizers: Fatiha Alabau-Boussouira, Peter Benner, Piermarco Cannarsa, Marco Sammartino.
 - July 2020 (postponed due to the pandemic), **INdAM Workshop 'Analysis and Numerics of Design, Control and Inverse Problems'**, Rome, Italy.
Organizers: Giuseppe Floridia and Enrique Zuazua.

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- June 2020 (postponed due to the pandemic), **JEDP Obernai**, France.
Organizers: David Dos Santos Ferreira and Laurent Thomann.
- May 2020 (postponed due to the pandemic), **PDE workshop**, ICMAT, Madrid, Spain. *Organizer:* Angel Castro.
- October 2019, **Math postdocs from the Paris region**, IHP, Paris, France.
Organizer: Thomas Alazard.
- September 2019, **XXI Conference UMI (Unione Matematica Italiana)**, Pavia, Italy.
Seminar session organized by Stefano Bianchini.
- July 2019, **Geometric Measure Theory and Partial Differential Equations**, University of Basel, Switzerland.
Organizers: Paolo Bonicatto, Gianluca Crippa, Elio Marconi.
- March 2019, **Journées Jeunes EDPistes 2019**, INSA, Rennes, France.
Organizers: Karine Beauchard, Rémi Carles, Olivier Ley, Karel Pravda-Starov, Miguel Rodrigues.
- December 2018, **Winter School on Fluid Dynamics, Dispersive Equations and Quantum Fluids**, Bressanone, Italy. *Organizers:* Fabio Ancona and Stefano Bianchini.
- September 2018, **Interactive workshop on hyperbolic equations**, Ferrara, Italy. *Organizers:* Andrea Corli and Massimiliano D. Rosini.
- August 2018, Mini-symposium **Modèles mathématiques et méthodes numériques en mécanique des milieux continus**, dans le cadre du XIV colloque Franco-Roumain de Mathématiques Appliquées, Bordeaux, France.
Organizers: Didier Bresch, Lorenzo Brandolese, Sanda Cleja-Tigoiu.
- July 2018, **International Workshop on Hyperbolic and Kinetic Problems: Theory and Applications**,
Institute of Mathematics, Academia Sinica, Taipei, Taiwan.
Organizers: Fabio Ancona, Stefano Bianchini and Tai-Ping Liu .

■ Talks at university seminars and working groups

- April 2021, **Analysis of Fluids and Related Topics, Princeton Fluid Seminar**,
Organizers: Peter Constantin, Sameer Iyer, Dan Ginsberg and Tristan Leger (Princeton University, US).
- March 2021, **Seminari generali IAC 2021**,
Organizer: Istituto per le Applicazioni del Calcolo Mauro Picone, CNR, Italy.
- March 2021, **Control Methods in Hyperbolic Partial Differential Equations Talks**,
Organizers: Fabio Ancona (Padova), Bani Anvari (London), Olivier Glass (Paris), Michael Herty (Aachen).

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- January 2021, **Online Analysis and PDE seminar**,
Organizers: Universidad Autónoma de Madrid (UAM), Universidad de Cantabria (UC), Universidad Carlos III (UC3M), Universidad Complutense de Madrid (UCM), Instituto de Ciencias Matemáticas (ICMAT), Instituto de Matemáticas de la Universidad de Sevilla (IMUS), Spain.
Invited by Rafael Granero Belinchón.
- December 2020, **Analysis and Mathematical Physics seminar, online**, SISSA, Trieste, Italy.
Organizers: Fabio Cavalletti, Alberto Maspero, Marcello Porta.
- December 2020, **Séminaire d'Analyse et Probabilité", Paris-Dauphine, online**, Paris Dauphine CEREMADE, France. *Organizers:* Emeric Bouin.
- October 2020, **CAA Online Seminar Series at FAU**, Erlangen, Germany.
[Link Slides and Video](#).
Organizers: Marius Yamakou, Enrique Zuazua.
- May 2020, **Séminaire du Laboratoire Jacques-Louis Lions -online- via Zoom**, LJLL, Paris, France. [Link YouTube](#).
Organizers: Y. Achdou, F. Bethuel, A. Cohen, A.-L. Dalibard, Y. Maday, F. Murat, B. Perthame, E. Trélat.
- May 2020, **Mathematics of Planet Earth Webinars: Analysis and Modelling, online MPESEMINARS2020**. [Link YouTube](#).
Organizers: Giulia Carigi, Francesca Elisa Leonelli, Gabriele Sbaiz, Milo Viviani.
- March 2020 (postponed due to the pandemic), **Analysis and Probability Seminar at Paris-Dauphine**, Paris, France.
Organizer: Emeric Bouin.
- February 2020, **Séminaire de l'équipe EDP-Physique Mathématique**, Institut Mathématique de Bordeaux, France.
Organizer: Laurent Michel.
- January 2020, **Séminaire ANEDP de Lille**, Université de Lille (Laboratoire Paul Painlevé), France.
Organizers: Maxime Herda Thomas Rey.
- November 2019, **Applied Maths Seminar**, Imperial College, London, UK. *Organizer:* Michele Coti Zelati.
- June 2019, **Group de travail MathOcéan**, IMT Toulouse, France.
Organizer: Jean-François Coulombel.
- November 2018, **Séminaire "EDP" de Rennes**, France. *Organizers:* Vincent Duchêne and Yannick Bonthonneau.
- May 2018, **EDP-Analyse Séminaire**, Institut Camille Jordan, Lyon, France. *Organizers:* Francesco Fanelli and Louis Dupaigne.

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- December 2017, **BGK approximations for hydrodynamic equations and the Xin-Jin system under the diffusion scaling**, ENS Lyon, France.
Organizer: Laure Saint-Raymond.
- May 2017, **Convergence of a vector-BGK approximation for the incompressible Navier-Stoker equations**, University of Vienna, Faculty of Mathematics, Wien, Austria.
Organizer: Ulisse Stefanelli.
- Nov. 2016, **The paradifferential approach to the local well-posedness of some problems in mixture theory**, Gran Sasso Science Institute, L'Aquila, Italy.
Organizers: Paolo Antonelli, Pierangelo Marcati.
- June 2016, **Well-posedness of a model of nonhomogeneous compressible-incompressible fluids**, DICATAM, Department of Mathematics, University of Brescia, Italy.
Organizer: Paolo Secchi.

Visits

- April 2020 (1 week) Imperial College of London - postponed due to the pandemic.
Organizer: Michele Coti Zelati.
- March 2020 (1 week) University of Basel - postponed due to the pandemic.
Organizer: Chiara Saffirio.
- January 2020 (3 days), I2M Marseille, France. *Organizer:* Charlotte Perrin.
- November 2019 (3 days), Imperial College, London, UK. *Organizer:* Michele Coti Zelati.
- July 2019 (10 days), MIT, Cambridge, USA. *Organizer:* Gigliola Staffilani.
- May-July 2019 (2 months), Junior Trimester in Kinetic Theory, HIM Bonn, Germany.
- April 2019 (1 week), GSSI, L'Aquila, Italy. *Organizer:* Pierangelo Marcati.
- March 2019 (1 week), I2M Marseille, France. *Organizer:* Charlotte Perrin.
- March 2019 (3 days), IRMAR, Rennes France. *Organizer:* Vincent Duchêne.
- November 2018 (2 days), University of Rennes 1, France. *Organizers:* Vincent Duchêne and Yannick Bonthonneau.
- September 2018 (3 days), University of Padova, Italy. *Organizer:* Fabio Ancona.
- September 2018 (3 days), University of Bonn, Germany. *Organizers:* Alessia Nota, Elena Pulvirenti.
- July 2018 (3 days), University of Rome Tor Vergata, Italy. *Organizer:* Andrea Braides.
- December 2017 (4 days), ENS Lyon, France. *Organizer:* Laure Saint-Raymond.
- November 2017 (1 week), ENS Lyon, France. *Organizer:* Laure Saint-Raymond.
- November 2017 (3 days), LJLL, UPMC, Paris, France. *Organizer:* Enrique Zuazua.
- September 2017 (3 days), LJLL, UPMC, Paris, France. *Organizer:* Enrique Zuazua.
- June 2017 (1 week), ENS Lyon, France. *Organizers:* Vincent Calvez, Laure Saint-Raymond.
- May 2017 (1 week), Faculty of Mathematics, University of Vienna, Wien, Austria. *Organizer:* Ulisse Stefanelli.
- November 2016 (2 days), Gran Sasso Science Institute, L'Aquila, Italy. *Organizers:* Paolo Antonelli, Pierangelo Marcati.
- June 2016 (2 days), DICATAM, Depart. of Math., University of Brescia, Italy. *Organizer:* Paolo Secchi.

Organization of conferences

- June 24-28, 2019. Bonn, Germany - Junior Trimester on Kinetic Theory at HIM - **Workshop: Effective equations: frontiers in classical and quantum systems.**
- <https://www.him.uni-bonn.de/de/programs/past-programs/past-junior-trimester-programs/kinetic-theory-2019/effective-equations/>
Co-organized with: Serena Cenatiempo, Lingbing He, Alessia Nota, Chaira Saffirio, Sergio Simonella and Raphael Winter.

Working Groups

- Groupe de travail "MathsInFluids" (2018-2019)** Lieu: UMPA ENS Lyon,
Organisateurs : D. Bresch (CNRS-LAMA Savoie Mont-Blanc), C. Lacave (IF-Grenoble) et L. Saint-Raymond (UMPA-ENS Lyon). <https://www-fourier.ujf-grenoble.fr/lacavec/MathsInFluids/>.
- Groupe de travail "MathsInFluids" (2017-2018)** Lieu: UMPA ENS Lyon,
Organisateurs : D. Bresch (CNRS-LAMA Savoie Mont-Blanc), C. Lacave (IF-Grenoble) et L. Saint-Raymond (UMPA-ENS Lyon). <https://www-fourier.ujf-grenoble.fr/lacavec/MathsInFluids/>.

Some event I took part

- **The mathematics of climate and the environment, Workshop 1, IHP, Paris, France** (2019).
- **Trimester on Kinetic Theory, Bonn, Germany** (2019).
- **Les 60 ans de Jean-Yves Chemin, IHP, Paris, France** (March 2019).
- **Systèmes Hors Equilibre, Lyon, France** (2018).
- **Young Women in Mathematical Physics, Bonn, Germany** (2018).
- **SISSA meets ENS Lyon, Trieste, Italy** (2018).
- **EMS Lecturer Summer School 2018, Rome, Tor Vergata, Italy** (2018).
- **Microlocal analysis, resonances and control theory in PDEs, Workshop GL2017, Cagliari, Sardegna, Italy** (2017);
- **Sussex Fluids Workshop 2017, University of Sussex, Brighton, UK** (2017);
- **IPERPV 2017, XVII Italian Meeting on Hyperbolic Equations, University of Pavia, Italy** (2017) (contributed talk);
- **9th Summer School in Analysis and Applied Mathematics, "Sapienza", University of Rome, Italy** (2017);
- **New trends in Control Theory and PDEs, INdAM, Rome, Italy** (2017);
- **Progetto MATHTECH - Modeling and computational approaches to Biology and Medicine, INdAM, Rome, Italy** (2017);
- **International Conference on Elliptic and Parabolic Problems, Gaeta, Italy** (2017) (short communication);
- **XVI International Conference on Hyperbolic Problems, Theory, Numerics, Applications, Aachen, Germany** (2016);
- **GSSI Summer School on Fluid Dynamics and Related Topics, L'Aquila, Italy** (2016);
- **9th European Conference on Elliptic and Parabolic Problems, Gaeta, Italy** (2016);
- **Innovative Algorithms and Analysis, INdAM, Rome, Italy** (2016),
- **Shocks, Singularities and Oscillations in Nonlinear Optics and Fluid Mechanics, INdAM, Rome, Italy** (2015),
- **Modelli matematici nella conservazione e valorizzazione dei beni culturali, Accademia Nazionale dei Lincei, Rome, Italy** (2015);
- **An afternoon of mathematics at Tor Vergata with Louis Nirenberg, Department of Mathematics, "Tor Vergata" University of Rome, Italy** (2015);
- **Espalia 2015, Dipartimento S.B.A.I., "Sapienza" University of Rome, Italy** (2015);

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- **EMS Lectures at IAC: Mathematical models in biomedicine**, IAC-CNR, Rome, Italy (2014).

Review activity

- Reviewer for MathSciNet (Reviewer Number: 141696).
- Journal de Mathématiques Pures et Appliquées.
- Discrete and Continuous Dynamical Systems.
- Communications in Mathematical Sciences.
- Journal of Differential Equations.
- Mathematische Annalen.
- Nonlinear Analysis: Real World Applications.
- Nonlinear Analysis.
- Mathematical Biosciences.
- Journal of Mathematical Analysis and Applications.

Editorial activity

Guest editor of a special issue on fluid dynamics, kinetic equations and turbulence. To appear on [Mathematics in Engineering](#). Joint with Chiara Saffirio.

Scientific divulgation

- January 2021 – video-interview for *Talent Harbour, Centrale dell'Acqua di Milano, MM* in collaboration with [Le Scienze](#). Link video: [Talent Harbour 7](#);
- March 2020 – videos/lectures on mathematical analysis for high school students for the RAI (national television) program **La scuola non si ferma**:
[Zettel maturità-video1](#);
[Zettel maturità-video2](#).
- Nov. 2016 – June 2017, Participation to a **Sperimental School on Diffusion of Science**, Libreria Assaggi, Rome;
- **Book review** (with Roberto Natalini): I manga delle Scienze, Analisi Matematica, *la Repubblica*, *Le Scienze* (2016);
- **Book review** (with Roberto Natalini): I manga delle Scienze, Algebra Lineare, *la Repubblica*, *Le Scienze* (2016).

Contacts

- Roberto Natalini, IAC-CNR, Roma, Italia.
- Laure Saint-Raymond, ENS de Lyon, Francia.
- Anne-Laure Dalibard, Sorbonne Université, Parigi, Francia.
- Gigliola Staffilani, MIT, Boston, Stati Uniti.
- Paolo Secchi, Università di Brescia, Italia.
- Jean-Yves Chemin, Sorbonne Université, Parigi, Francia.
- Enrique Zuazua, DeustoTech, Bilbao e UAM, Madrid, Spagna.
- Laurent Gosse, IAC-CNR, Roma, Italia.

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