

ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

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Alessandro Monguzzi

CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	MONGUZZI
NOME	ALESSANDRO
DATA DI NASCITA	14/04/1986

Alessandro Monguzzi

Curriculum Vitae

Università degli Studi di Milano–Bicocca
Dipartimento di Matematica e Applicazioni
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Positions

- June 2019 – present **Postdoctoral research fellow**, *Università degli Studi di Milano–Bicocca*, Milano, Italy.
Mentor: Prof. B. Di Blasio.
- 2015 – May 2019 **Postdoctoral research fellow**, *Università degli Studi di Milano*, Milano, Italy.
Mentor: Prof. M. Salvatori.
- 2012 – 2014 **Visiting Scholar**, *University of Arkansas*, Fayetteville, AR, USA.
Visiting scholar at the University of Arkansas within my Ph.D. program at Università degli Studi di Milano.

Education

- 2018 **FOR24**, *Università degli Studi di Milano*, Milano, Italy.
One-year program to obtain 24 certified credits in anthropo-psycho-pedagogic topics and in education methods and technologies necessary to teach in Italian secondary schools.
- 2011 – 2015 **Ph.D. in Mathematics**, *Università degli Studi di Milano*, Milano, Italy.
Thesis: “On the regularity of singular integral operators on complex domains”.
Advisor: Prof. Marco M. Peloso.
- 2008 – 2011 **Masters Degree in Mathematics**, *Università degli Studi di Milano*, Milano, Italy.
Thesis: “La teoria dei pesi A_p per misure in \mathcal{R}^n ” (in Italian).
Advisor: Prof. Marco M. Peloso.
- 2005 – 2008 **Bachelor Degree in Mathematics**, *Università di Milano–Bicocca*, Milano, Italy.
Thesis: “Sul Teorema di C. Fefferman per i moltiplicatori” (in Italian).
Advisor: Prof. S. Meda.

Publications

Peer-reviewed articles.

1. “Quaternionic inner and outer functions”, with Daniel Seco and Giulia Sarfatti, *Concrete Operators*, 6 (2019), no. 1, pp. 44-57.
2. “Paley–Wiener Theorems on the Siegel upper half-space”, with Nicola Arcozzi, Marco M. Peloso and Maura Salvatori, *J. Fourier Anal. Appl.* 25 (2019), no. 4, 1958–1986.
3. “Shift Invariant Subspaces of slice L^2 functions”, with Giulia Sarfatti, *Ann. Acad. Sci. Fenn. Math.* 43 (2018), 1045-1061.
4. “Sharp estimates for the Szegő projection on the distinguished boundary of model worm domains”, with Marco M. Peloso, *Integral Equations Operator Theory* 89 (2017), no. 3, 315-344.
5. “Regularity of the Szegő projection on model worm domains”, with Marco M. Peloso, *Complex Var. Elliptic Equ.* 62 (2017), no. 9, 1287-1313.

6. "A comparison between the Bergman and Szegő kernels of the non-smooth worm domain D'_β ", *Complex Anal. Oper. Theory* 10 (2016), no. 5, 1017 – 1043.
7. "On Hardy spaces on worm domains ", *Concr. Oper.* 3 (2016), 29 – 42.
8. "Hardy Spaces and the Szegő projection of the non-smooth worm domain D'_β ", *J. Math. Anal. Appl.* 436 (2016), no. 1, 439 – 466.

Accepted for publication.

1. "Fractional Laplacian, homogeneous Sobolev spaces and their realizations", with Marco M. Peloso and Maura Salvatori, accepted for publication on *Ann. Mat. Pura Appl.* (2020). DOI: 10.1007/s10231-020-00966-7. Preprint available online (ArXiv).
2. "Holomorphic function spaces on the Hartogs triangle", accepted for publication on *Mathematische Nachrichten* (2020). Preprint available online (ArXiv).
3. "(Ir-)Regularity of canonical projection operators on some weakly pseudoconvex domains", with Marco M. Peloso (2020). Survey paper accepted for publication on *Lecture notes of Seminario Interdisciplinare di Matematica*. Preprint available online (ArXiv).

Submitted for publication.

1. "Ahlfors regular spaces have regular subspaces of any dimension", with Nicola Arcozzi and Maura Salvatori (2019). Preprint available online (ArXiv).
2. "Fractional Paley–Wiener and Bernstein spaces", with Marco M. Peloso and Maura Salvatori (2020). Preprint available online (ArXiv).

In preparation and other articles.

1. "Spaces of entire functions of exponential type in \mathbb{C}^{n+1} ", with Marco M. Peloso and Maura Salvatori. In preparation.

Research Projects

GNAMPA 2020 Principal investigator of the project "Between harmonic analysis and several complex variables".

Prin 2015 "Varietà reali e complesse: geometria, topologia e analisi armonica". Role: participant (Coord: MiUR Marco M. Peloso, P.I.: Fulvio Ricci).

Prin 2010–11 "Varietà reali e complesse: geometria, topologia e analisi armonica". Role: participant (Coord: MiUR Marco M. Peloso, P.I.: Fulvio Ricci).

Talks and seminars

Invited talks and seminars.

Feb. 2021 (scheduled) Real and complex manifolds. The mathematical heritage of Edoardo Vesentini, Scuola Normale Superiore, Pisa, Italy.

Sep. 2020 (scheduled) Workshop on Hypercomplex Analysis, Politecnico di Milano, Italy.

May 2020 CR-geomety and PDE's - IX, Levico Terme, Italy. *The event was canceled due to the Covid19 health emergency.*

- Feb. 2020 Workshop 2020 “Varietà reali e complesse: geometria, topologia e analisi armonica”, Scuola Normale Superiore, Pisa, Italy. *The event was canceled due to the Covid19 health emergency.*
- Feb. 2020 Università di Bologna, Seminar in the series BAD seminars.
- Sep. 2019 XXI Congresso UMI - Special session in Harmonic Analysis, Pavia, Italy.
- Jul. 2019 Politecnico di Milano, Analysis Seminar, Milano, Italy.
- May 2019 Analysis Days in Piedmont 2019 - workshop organized by the Department of Mathematics of the University of Bologna in collaboration with the Chebyshev Laboratory, Salmour, Italy.
- Jan. 2019 Nanoworkshop on function spaces, Università di Bologna, Italy.
- Nov. 2017 Università di Bologna, Analysis Seminar in the series “Complex Analysis Lab”, Bologna, Italy.
- Nov. 2015 University of Kansas Analysis Seminar, University of Kansas, Lawrence, Kansas, USA.
- Mar. 2015 Workshop 2015 “Varietà reali e complesse: geometria, topologia e analisi armonica”, Scuola Normale Superiore, Pisa, Italy.
- Jul. 2013 Università di Milano Bicocca Harmonic Analysis Seminar, Università di Milano Bicocca, Milano, Italy.

Other selected talks and presentations.

- Jun. 2020 XXXIX Convegno Nazionale di Analisi Armonica, on-line edition during the Covid19 health emergency.
- Sep. 2019 Summer School on Applied Harmonic Analysis and Machine Learning, Genova, Italy.
- May 2019 XXXVIII Convegno Nazionale di Analisi Armonica, Bergamo, Italy.
- Jun. 2018 15th Advanced Course in Operator Theory and Complex Analysis, Bologna, Italy.
- May 2018 New Trends in Harmonic Analysis, Torino, Italy.
- Jun. 2017 14th Advanced Course in Operator Theory and Complex Analysis, Madrid, Spain.
- May 2017 Hilbert Function Spaces, Gargnano, Italy.
- May 2017 XXXVII Convegno Nazionale di Analisi Armonica, Bressanone, Italy.
- Jun. 2016 XXXVI Convegno Nazionale di Analisi Armonica, Gargnano, Italy.
- Jun. 2015 12th Advanced Course in Operator Theory and Complex Analysis, Bologna, Italy.
- Feb. 2013 University of Arkansas Analysis Seminar, University of Arkansas, Fayetteville, Arkansas, USA.

Visits

- Sep. 2018 Università di Firenze, Firenze, Italy. Scientific visit to Giulia Sarfatti (1 week).
- Sep. 2017 - present Università di Bologna, Bologna, Italy. Regular visits to the Department of Mathematics to attend the activities of the Complex Analysis Lab (<https://site.unibo.it/complex-analysis-lab/en>). Scientific supervisor: Nicola Arcozzi.
- Nov. 2015 University of Kansas, Lawrence, Kansas, USA. Scientific visit to Jarod Hart (1 week).
- Nov. 2015 Washington University in St. Louis, Missouri, USA. Scientific visit to Steven G. Krantz (3 weeks).
- Mar. 2014 – Visiting Scholar, University of Arkansas, Fayetteville, Arkansas, USA. Studying period during May 2014 my PhD. Scientific supervisor: Andrew S. Raich.
- Aug. 2013 – Visiting Scholar, University of Arkansas, Fayetteville, Arkansas, USA. Studying period during Oct. 2013 my PhD. Scientific supervisor: Andrew S. Raich.
- Sep. 2012 – Visiting Scholar, University of Arkansas, Fayetteville, Arkansas, USA. Studying period during Apr 2013 my PhD. Scientific supervisor: Andrew S. Raich.

Affiliations

- UMI Member of UMI (Unione Matematica Italiana - Italian Mathematical Society) since 2019.
- Indam Group Member of Italian National Group for Mathematical Analysis, Probability and their Applications (GNAMPA). . 2012–2013 and 2015–2019.

Referee and Review Services

Reviewer for the AMS Mathematical Reviews and for Zentralblatt MATH.

Referee for *Journal of Mathematical Analysis and Applications*, *Boletín de la Sociedad Matemática Mexicana*, *Mathematical Methods in the Applied Sciences* and *Mathematics*.

Conference/Seminars organization

- Sep. 2020 - Co-organizer of the series of on-line seminars “Seminari di Analisi Armonica a distanza”.
present Webpage: <https://sites.google.com/view/seminarivaa/>.
- Sep. 2017 - Co-organizer and occasional speaker of the series of seminars “Complex Analysis Lab” at
present University of Bologna. Webpage: <https://site.unibo.it/complex-analysis-lab/en>.
- May 30 - Member of the organizing committee of the XXXVI Convegno Nazionale di Analisi Armonica
June 3, 2016 held in Gargnano, Italy.

Selected Conferences, Workshops and Schools Attended

- Sep. 2019 Indam Workshop - Complex and Fourier Analysis and Operator Theory, Roma, Italy.
- Sep. 2019 Summer School on Applied Harmonic Analysis and Machine Learning, Genova, Italy.
- Sep. 2019 XXI Congresso UMI, Pavia, Italy.
- May 2019 XXVIII Convegno Nazionale di Analisi Armonica, Bergamo, Italy.
- May 2019 Analysis Days in Piedmont 2019, Salmour, Italy.
- Jan. 2019 Nanoworkshop on function spaces, Bologna, Italy.
- Jun. 2018 Geometric Aspects of Harmonic Analysis: a conference on the occasion of Fulvio Ricci's 70th birthday, Cortona, Italy.
- Jun. 2018 15th Advanced Course in Operator Theory and Complex Analysis, Bologna, Italy.
- Jun. 2018 CR-Geometry and PDE's, Levico Terme, Trento, Italy.
- May 2018 New Trends in Harmonic Analysis, Torino, Italy.
- Feb. 2018 Workshop 2018: Varietà reali e complesse: geometria, topologia e analisi armonica, Pisa, Italy.
- Jun. 2017 14th Advanced Course in Operator Theory and Complex Analysis, Madrid, Spain.
- May 2017 XXXVII Convegno Nazionale di Analisi Armonica, Bressanone, Italy.
- May 2017 Hilbert Function Spaces 2017, Gargnano, Italy.
- Feb. 2017 Workshop 2017: Varietà reali e complesse: geometria, topologia e analisi armonica, Pisa, Italy.
- Jun. 2016 XXXVI Convegno Nazionale di Analisi Armonica, Gargnano, Italy.
- Jan. 2016 Workshop 2016: Varietà reali e complesse: geometria, topologia e analisi armonica, Pisa, Italy.
- Jun. 2015 12th Advanced Course in Operator Theory and Complex Analysis, Bologna, Italy.
- Mar. 2015 Workshop 2015: Varietà reali e complesse: geometria, topologia e analisi armonica, Pisa, Italy.
- Feb. 2015 Congreso de la RSME, Granada, Spain.
- Jul. 2014 First Joint International Meeting RSME–SCM–SEMA–SIMAI–UMI, Bilbao, Spain.
- Jun. 2014 XXXIV Convegno Nazionale di Analisi Armonica, Pisa, Italy.
- Apr. 2014 39th Spring Lecture Series: Multiparameter Geometry and Analysis. A series of five lectures by Alexander Nagel, Fayetteville, Arkansas, USA.

- Feb. 2014 Workshop 2014 varietà reali e complesse: geometria, topologia e analisi armonica, Pisa, Italy.
- Jun. 2013 XXXIII Convegno Nazionale di Analisi Armonica, Alba, Italy.
- May 2013 Hilbert Function Spaces, Gargnano, Italy.
- Apr. 2013 38th Spring Lecture Series: Extension and Interpolation. A series of five lectures by Charles Fefferman, Fayetteville, Arkansas, USA.
- Jun. 2012 9th International Conference On Harmonic Analysis and Partial Differential Equations, El Escorial, Madrid, Spain.
- Jun. 2012 XXXII Convegno Nazionale di Analisi Armonica, Genova, Italy.
- Aug. 2011 Scuola Matematica Interuniversitaria, Perugia, Italy.
- May 2011 Doc-course-IMUS 2011: Harmonic Analysis, Metric Spaces and Applications to P.D.E., Sevilla, Spain.
- Feb. 2011 1st Bicocca HART (Harmonic Analysis and Related Topics), Milano, Italy.

Teaching Activity

- Spring 2020 **Lecturer**, *Università degli Studi di Milano–Bicocca*,
PhD Course in Harmonic Analysis.
7 hours.
- Fall 2019 **Teaching Assistant**, *Università degli Studi di Milano–Bicocca*,
Course: Matematica I - undergraduate students in Environmental Sciences.
30 hours.
- Fall 2019 **Teaching Assistant**, *Università degli Studi di Milano–Bicocca*,
Course: Analisi Matematica - undergraduate students in Computer Sciences.
20 hours.
- Spring 2019 **Teaching Assistant**, *Università degli Studi di Milano*,
Course: Analisi Complessa - undergraduate and master students in Mathematics.
22 hours.
- Spring 2019 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 4 - undergraduate students in Mathematics.
30 hours.
- Fall 2018 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 1 - undergraduate students in Mathematics.
40 hours.
- Spring 2018 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 4 - undergraduate students in Mathematics.
30 hours.
- Fall 2017 **Teaching Assistant**, *Università degli Studi di Milano*,
Course: Istituzioni di Matematica - undergraduate students in Chemistry.
30 hours.
- Fall 2017 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 1 - undergraduate students in Mathematics.
40 hours.
- Spring 2017 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 4 - undergraduate students in Mathematics.
30 hours.

- Fall 2016 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 1 - undergraduate students in Mathematics.
40 hours.
- Fall 2016 **Teaching Assistant**, *Politecnico di Milano*,
Course : Analisi Matematica 2 - undergraduate students in Computer Engineering.
40 hours.
- Spring 2016 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 2 - undergraduate students in Physics.
40 hours.
- Spring 2016 **Teaching Assistant**, *Politecnico di Milano*,
Course: Analisi Matematica 2 - undergraduate students in Physics Engineering.
50 hours.
- Fall 2015 **Teaching Assistant**, *Politecnico di Milano*,
Course: Analisi Matematica 2 - undergraduate students in Computer Engineering.
40 hours.
- Spring 2015 **Teaching Assistant**, *Università di Milano–Bicocca*,
Course: Matematica - undergraduate students in Sociology.
26 hours.
- Spring 2015 **Teaching Assistant**, *Politecnico di Milano*,
Course: Analisi Matematica 2 - undergraduate students in Civil Engineering.
48 hours.
- Fall 2014 **Teaching Assistant**, *Politecnico di Milano*,
Course: Analisi Matematica 2 - undergraduate students in Computer Engineering.
40 hours.
- Fall 2014 **Tutor**, *Università degli Studi di Milano*,
Course: Analisi Matematica 1 - undergraduate students in Mathematics.
40 hours.
- Fall 2013 **Teaching Assistant**, *Università degli Studi di Bergamo*,
Course: Analisi Matematica 2 - undergraduate students in Civil Engineering.
20 hours.
- Fall 2013 **Teaching Assistant**, *Politecnico di Milano*,
Course: Analisi Matematica 1 - undergraduate students in Computer Engineering.
40 hours.
- Fall 2011 **Teaching Assistant**, *Politecnico di Milano*,
Course: Analisi Matematica 1 - undergraduate students in Computer Engineering.
40 hours.
- Fall 2009 **Tutor**, *Università degli Studi di Milano*,
Project MINIMAT for high school students..
20 hours.

Other Activities

2016 – present Collaborator of Kangourou Italia for the mathematics competitions.

Data

10/09/2020

Luogo

Milano