Emanuel A.S. Carneiro
Ph.D. in Mathematics

ICTP - The Abdus Salam International Centre for Theoretical Physics   Contact: *carneiro@ictp.it*
Mathematics Section
Strada Costiera, 11   https://sites.google.com/view/emanuelcarneiro
I - 34151 Trieste Italy

PERSONAL

Citizenship Brazilian

EDUCATION

Ph.D. in Mathematics. 2005 - 2009.
The University of Texas at Austin.
Thesis: Extremality, symmetry and regularity issues in harmonic analysis.
Advisors: William Beckner and Jeffrey Vaaler.

Master of Sciences in Mathematics. 2002 - 2004.
Universidade Federal do Ceará - Brazil.

Bachelor Degree in Mathematics (Summa Cum Laude). 1999 - 2002.
Universidade Federal do Ceará - Brazil.

APPOINTMENTS

ICTP - Trieste, Research Scientist, 2018 - present.

Stanford University, Fulbright Visiting Associate Professor, 2017.

IMPA - Rio de Janeiro, Assistant Professor (2011 - 2016); Associate Professor, 2016 - 2018.

McKinsey and Company, Associate Consultant, 2010 - 2011.

Institute for Advanced Study, Princeton, Member, 2009 - 2010.

PUBLICATION LIST MATHSCINET - MR 847171

AWARDS AND HONORS

2022 Rubio de Francia Memorial Lecture - Universidad Autonoma de Madrid.

2023, 2020, 2017 Carlos Gutierrez Thesis Prize (Advisor), USP - São Carlos / Brazilian Math. Soc.

2020, 2017 CAPES Thesis Prize (Advisor).

2015 Simons Associate Fellow of ICTP - Trieste (2015 - 2020).

2014 Elected Affiliated Member of the Brazilian Academy of Sciences (2014 - 2018).

Ph.D. STUDENTS

9. Tolibjon Ismoilov, SISSA, current.

8. Antonio Pedro Ramos, SISSA, current.

7. Emily Quesada Herrera, Ph.D. IMPA, 2022.
Thesis: On uncertainty principles, Fourier optimization and the Riemann zeta-function.
Carlos Gutierrez Thesis Prize, USP / Brazilian Math. Soc., 2023.

6. Cristian Andres Gonzalez Riquelme, Ph.D. IMPA, 2021.
Thesis: Fine properties of maximal operators.

5. Carlos Andrés Chirre Chavez, Ph.D. IMPA, 2019.
Thesis: *Bounds for the Riemann zeta-function via Fourier analysis.*
Carlos Gutierrez Thesis Prize, USP - São Carlos / Brazilian Math. Soc., 2020. CAPES Thesis
Prize, 2020.

4. Mateus Sousa, Ph.D. IMPA, 2017.
   Thesis: *Some sharp inequalities in harmonic analysis.*

3. Renan Finder, Ph.D. IMPA, 2016.
   Thesis: *Variation-diminishing maximal operators and the argument of L-functions.*

2. Jose Ramon Madrid Padilla, Ph.D. IMPA, 2016.
   Thesis: *Regularity of fractional maximal functions and extremal functions of exponential type.*

1. Felipe Gonçalves, Ph.D. IMPA, 2016.
   Thesis: *Extremal problems, reconstruction formulas and approximations of Gaussian kernels.*
   Carlos Gutierrez Thesis Prize, USP / Brazilian Math. Soc., 2017. CAPES Thesis Prize, 2017.

DISSEMINATION AND OUTREACH WORK

As part of the dissemination effort, over the last years I had five of my courses at IMPA and two courses at ICTP entirely recorded, in a total more than 140 lectures of 1:30h to 2h each. These are on the IMPA channel and the ICTP - Diploma channel at YouTube.com, available for free to the general public.

2020 Real Analysis - 15 lectures.

2019 Functional Analysis - 20 lectures.

2018 Sphere packings, Fourier analysis and beyond (Ph.D) - with Felipe Gonçalves - 25 lectures.

2015 Harmonic Analysis (Ph.D.) - 30 lectures.

2015 Analytic Number Theory (Ph.D.) - 20 lectures.

2013 Hilbert Spaces of Entire Functions (Ph.D) - 25 lectures.

2011 Partial Differential Equations (M.Sc.) - 25 lectures.