

CURRICULUM VITAE - GIOVANNI CANESTRARI

1. EMPLOYMENT

- University of Bologna (Sep 2024 - ongoing) *Postdoc*.
Supervisor: prof. Marco Lenci.

2. EDUCATION

- University of Roma Tor Vergata (Nov 2021 - ongoing) *Phd in mathematics*.
Supervisor: prof. Carlangelo Liverani.
- University of Bologna (Oct 2018 - Feb 2021) *M.Sc. in theoretical physics, 110/110 cum laude*.
Supervisor: prof. Marco Lenci; Thesis: ‘On the Kolmogorov property of a class of infinite measure hyperbolic dynamical systems’.
- University of Bologna (Oct 2015 - Dec 2018) *B.Sc. in physics, 110/110 cum laude*.
Supervisor: prof. Marco Lenci; Thesis: ‘Sull’ergodicità di una classe di sistemi caotici’.
- Liceo Statale ‘L.Galvani’ (2010-2015) *Diploma di maturità classica, 100/100*.

3. PUBLICATIONS

- Discontinuities cause essential spectrum (with Oliver Butterley and Sakshi Jain), *Communications in Mathematical Physics*, vol 398, pag 627–653 (2023);
- Discontinuities cause essential spectrum on surfaces (with Oliver Butterley and Roberto Castorrini), *Annales Henri Poincaré* (2024);
- Heat equation from a deterministic dynamics (with Carlangelo Liverani and Stefano Olla), preprint.
- Uniformly global observables for 1D maps with an indifferent fixed point (with Marco Lenci), preprint.
- On linear response for discontinuous perturbations of smooth endomorphisms, preprint.

4. ACADEMIC ACTIVITIES

Talks: I presented a seminar in the following occasions:

- ICTP, Trieste (28/07/2022).
- University of Pisa (9/11/2022).
- Physics department of University of Bologna (4/5/2023).

- Short talk at workshop about 'Partial Hyperbolicity' at the mathematics department of Maryland University (8/05/2023).
All these about: 'Discontinuities and essential spectrum'.
- 5th DAI day, (18/12/2023) about 'Heat equation from a deterministic dynamics'.
- DocTorV seminar in Tor Vergata, (4/05/2024) about 'Chaotic dynamics and their invariant measures'.
- Workshop on 'Macroscopic Behavior of Deterministic Systems', (09/09/2024) at Maryland University, about 'Heat equation from a deterministic dynamics'.
- Dynamics Seminar at Maryland University on 'Linear response for discontinuous perturbations of smooth endomorphisms' (03/10/2024).

Visiting periods:

- Maryland university in May - June 2023;
- Université Paris Dauphine - July 2023 to collaborate with prof. Stefano Olla.
- Stony Brook university - November 2023.
- Maryland university - September-November 2024.

Referee activity: I have been asked to do referee activity for the following journals

- Journal of Statistical Physics,
- Journal of Dynamical and Control Systems.

Attended Conferences and Schools: I attended the following Conference and Schools

- 'Modern Aspects of Dynamical Systems', 20-24 July 2020 ;
- DinAmici Day at Parma, 17/12/2021;
- Winter school at Grenoble 'Billards dans le Vercors', 17/1/2022-21/12/2021
- DinAmici Conference at Varese, 6/6/2022-9/6/2022;
- 'Méthodes probabilistes pour les systèmes dynamiques aléatoires et variant avec le temps' at CIRM, 3/10/2022-7/10/2022;
- 'Statistical and Computational Aspects of Dynamics' at Centro De Giorgi – SNS, Pisa. December 13 – 16, 2022.
- 'La dynamique des systèmes d'Anosov', Marseille, 10-14 April 2023.
- 'Partial Hyperbolicity' in Maryland, 8-14 May 2023.
- Summer school on 'Partial Hyperbolicity' in Maryland, 1-10 June 2023.
- 'Microlocal and Probabilistic Methods in Geometry and Dynamics', from 3 to 7 July 2023 (contributed with a poster).
- 5th DAI day in Bologna, 18/12/2023.
- School on probabilistic aspects of hyperbolic systems (August 12, 2024 - August 16, 2024), Budapest.
- Workshop on statistical properties of chaotic dynamics in and out of equilibrium (August 19, 2024 - August 23, 2024), Budapest (contributed with a poster).

- DinAmicI in Rio, Dynamics, Applications, Interactions (September, 2-6, 2024), Rio de Janeiro (contributed with a poster).
- Workshop on ‘Macroscopic Behavior of Deterministic Systems’, (09/09/2024) at Maryland University.
- Workshop on dynamical systems at Penn State university, (14-17/11/2024).

Other:

- I designed the DAI logo (click on the letters) at <https://www.dinamici.org/>.

5. TEACHING

- Tutor for the course of analysis 2 in ‘Engineering Sciences’, held by prof. Oliver Butterley, academic year 2022-2023.
- Tutor for the course of analysis 2 for applied chemistry, data science and material science at Tor Vergata held by prof. Carlangelo Liverani, academic year 2023-2024.