



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 6125

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at Dipartimento di MATEMATICA

Scientist- in - charge: PROF NEEMAN

**ANNA BARBIERI**

**CURRICULUM VITAE**

### PERSONAL INFORMATION

Surname	BARBIERI
Name	ANNA

### PRESENT OCCUPATION

Appointment	Structure
ASSEGNISTA DI RICERCA	UNIVERSITA' DI VERONA

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	MATEMATICA	UDINE	19/03/2013
Specialization			
PhD	MATEMATICA E STATISTICA	PAVIA	27/02/2017
Master			
Degree of medical specialization			
Degree of European specialization			
Other			



## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City

## FOREIGN LANGUAGES

Languages	level of knowledge
ENGLISH	FLUENT

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2017-2020	RESEARCH ASSOCIATE, UNIVERSITY OF SHEFFIELD
2020-2022	ASSEGNISTA DI RICERCA, UNIVERSITA' DEGLI STUDI DI MILANO
2022	ASSEGNISTA DI RICERCA, UNIVERSITA' DEGLI STUDI DI PADOVA
2023	ASSEGNISTA DI RICERCA, UNIVERSITA' DI VERONA

## TRAINING OR RESEARCH ACTIVITY

description of activity
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## PROJECT ACTIVITY

Year	Project
2014-2016	ERC StG-307119-StabAGDG, PI Jacopo Stoppa, "Stability and wall-crossing in algebraic and differential geometry".
2017-2020	ERC AdG-670298-StabilityDTCluster, PI Tom Bridgeland, "Stability conditions, Donaldson-Thomas invariants and cluster varieties"
2020-2022	ERC CoG-771507-StabCondEn, PI Paolo Stellari, "Stability Conditions, Moduli spaces, and enhancements"
2023	REDCOM, PI Lidia Angeleri-Hügel, "Reducing complexity in algebra, logic, combinatorics", Fondazione Cariverona "Ricerca Scientifica di Eccellenza 2018"

## PATENTS

Patent



## CONGRESSES AND SEMINARS

### Invited mini-courses:

1. 3-6/08/2022, workshop ICRA 2022 - International Conference on Representations of Algebras, Montevideo (Uruguay), titolo: Spaces of Bridgeland stability conditions

Commissione scientifica: Andrea Solotar, Lidia Angeleri, Aslak Buan, Claude Cibils, Bernhard Keller, Henning Krause, Eduardo Marcos, Octavio Mendoza, Manuel Saorin, Sibylle Schroll, Gordane Todorov, Michael Wemyss, Pu Zhang.

### Talks at conferences and workshops (invited talks, except contributed talks 4.,7.,16):

2. 01/12/2023, Algebraic Geometry in Pavia: Young Perspectives, titolo: Moduli spaces of stability conditions and of quadratic differentials

3. 6-11/11/2023, Bonn Hausdorff Institute, Derived Workshop, titolo: Moduli spaces of stability conditions and of quadratic differentials (Bonn, Germany)

4. 09/2023, Congresso UMI, Pisa, Sez.14-algebra, "Quozienti di categorie di Ginzburg"

5. 25-29/04/2022, Workshop in Quantum Geometry presso IHES (Paris, France)  
titolo: "Riemann-Hilbert problem from refined Donaldson-Thomas theory"

6. 30/09-1/10/2021 conferenza Ricercatori in Algebra e Geometria, Pisa, Scuola Normale Superiore, titolo: From stability conditions to special functions

7. 09/2021 Summer School: Irregular Riemann-Hilbert correspondence (reading school), Aussois CNRS (France), titolo "Notion of good formal decomposition, sectorial decomposition with parameters" (contributed talk)

8. 25-28/11/2019 Workshop BPS-states, topological recursion, exact WKB and abelianisation, Hamburg (Germany), titolo: A quantum Riemann-Hilbert problem in Donaldson-Thomas theory

9. 15-16/08/2019 MSRI workshop Holomorphic Differentials in Mathematics and Physics - Connections for women, MSRI, Berkeley (USA), titolo: Kontsevich-Soibelman wall-crossing formula and a (quantum) Riemann-Hilbert problem

10. 27-30/03/2019 Geometry and Mathematical Physics Workshop, Loughborough (UK)  
titolo: A Riemann-Hilbert problem for uncoupled BPS structures

11. 29/10-02/11/2018 BIRS workshop Stability Conditions and Representation Theory of Finite-Dimensional Algebras at Casa Matemática Oaxaca (Mexico)  
titolo: A Riemann-Hilbert problem from stability conditions



12. 14/12/2017 East Midlands Seminars in Geometry on Stability conditions, Leicester (UK),  
titolo: Geometric structures on some spaces of stability conditions
  13. 04-08/12/2017 Workshop  $A_\infty$ -structures and representation theory, Bonn (Germany)  
titolo: A construction of Frobenius manifold from stability conditions on  $\text{Rep}(Q)$
  14. 23-24/02/2017 2CinC, Cow and Calf Conference in Cardiff, Cardiff (UK)  
titolo: A Frobenius type structure from stability data
  15. 19-20/12/2016, Seminari di Natale, Milano Statale, titolo: A construction of Frobenius manifold from stability conditions
  16. 07/2016 Summer school in enumerative geometry, SISSA, Trieste, titolo: A convergence property for a deformation of Joyce generating functions
- Other invited talks :**
17. 07/12/2023, FD seminar (online), "Multi-scale stability conditions on  $A_n$ -Ginzburg categories"
  18. 6-7/06/2023, Nouveau séminaire ALPE, Toulouse (Fr), "Moduli spaces of Bridgeland stability conditions and of multi-differentials"
  19. 19/04/2023, MALGA seminars (Padova-Verona), "Categories from marked surfaces and their exchange graphs"
- Curriculum Vitae: Anna Barbieri 4
20. 01/12/2022, LAGOON seminars series - Leicester (UK) and Cologne (De) (online), "Categories associated with weighted marked surfaces and their stability manifold"
  21. 15/11/2022, Milano Statale, "Ginzburg categories associated with weighted marked Riemann surfaces"
  22. 21/06/2022, Padova, "On quiver categories associated to quadratic differentials"
  23. 17/05/2022, Università e Politecnico di Torino (online), "On quiver categories associated to quadratic differentials"
  24. 29/11/2021, seminario in Cerimonia in memoria di Paolo de Bartolomeis, Firenze, dipartimento di Matematica "Ulisse Dini", come vincitrice di un assegno di ricerca a lui dedicato
  25. 09/03/21, OnlineClusterAlgebraSeminars, "From special functions to stability conditions"
  26. 18/02/2021, Roma 3 (online), "From Bridgeland stability conditions to special functions"
  27. 24/06/2020, Milano (online), "From Bridgeland stability conditions to special functions"
  28. 05/06/2020, MPI (Bonn), corso di ricerca online Stability conditions, DT invariants and their



- geometry, organizzato da G.Borot, "A quantum Riemann-Hilbert problem from DT theory"
29. 23/04/2020, Parigi (online), "From Bridgeland stability conditions to special functions"
30. 13/03/2019, London UCL, "A Riemann-Hilbert problem for uncoupled BPS structures"
31. 12/03/2019, Canterbury, Kent (UK), Mathematical Physics and Integrable Systems seminars in Kent, "A Riemann-Hilbert problem for uncoupled BPS structures"
32. 07/01/2019, Lisbon, Seminário do Grupo de Física Matemática, "Introduction to Wall-Crossing for Bridgeland stability conditions"
33. 14/11/2018, Birmingham, per Geometry and Mathematical Physics seminars, "A Riemann-Hilbert problem for BPS structures"
34. 24/05/2018, EDGE Seminars at Edinburgh, "A Riemann-Hilbert problem for uncoupled BPS structures"
35. 05/04/2018, SISSA, Trieste, "A Riemann-Hilbert problem for BPS structures"
36. 15/03/2018, Oslo, Algebra seminar, "A Riemann-Hilbert problem for BPS structures"
37. 29/11/2017, Sheffield, Pure Maths Colloquium, "Introduction to Frobenius manifolds"
38. 26/02/2016, Cambridge, Junior Geometry Tea, "Frobenius manifolds and isomonodromic families of connections"

## PUBLICATIONS

### Phd Thesis

[1] PhD Thesis: Frobenius type structures and manifolds from stability conditions on quiver categories, author: A. Barbieri (2017)

### Journal articles (peer-reviewed)

[2] Frobenius type and Cecotti-Vafa-structures for Donaldson-Thomas theory and a convergence property, authors A. Barbieri, J. Stoppa.

In Communications in Analysis and Geometry, (2019) Vol. 27, No. 2, pages 287-327.

[3] A construction of Frobenius manifolds from stability conditions, authors: A. Barbieri, J. Stoppa, T. Sutherland.

In Proceedings of the London Mathematical Society, (2019) 118(6), pages 1328-1366.

[4] A Riemann-Hilbert problem for uncoupled BPS structures, autore A. Barbieri

In Manuscripta Mathematica, (2020) 162, pages 1–21.

[5] A quantized Riemann-Hilbert problem in Donaldson-Thomas theory, authors: A. Barbieri, T.



Bridgeland, J. Stoppa.

In International Mathematics Research Notices, (2022) Vol.2022, Issue5, pages 3417–3456.

### Submitted papers

[6] Stability conditions as quadratic differentials: subsurface collapsing, with M. Möller, Y. Qiu, J.

So, arxiv:2212.08433

[7] Spaces of Bridgeland stability conditions in Representation Theory, submitted for the "Proceedings Volume of the XX ICRA"

[8] A smooth compactification of spaces of stability conditions: the case of the  $A_n$  quiver, with M.

Möller, J. So, arxiv:2312.02686.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Place and date: Padova, 03/01/2024