Alejandra Rincón Hidalgo

CONTACT
INFORMATION

alrinconh@gmail.com
https://arinconh.github.io/

EDUCATION

PhD in mathematics (Summa Cum Laude)
Free University of Berlin.
Berlin Mathematical School.
October 2014 - June 2019.
Berlin, Germany.
Ph.D thesis: Bridgeland stability conditions on the category of holomorphic triples .
Advisor: Prof. Dr. Alexander Schmitt and Prof. Dr. Bernd Kreussler.

MSc in Mathematics (GPA: 1.4, German system)
University of Bonn.
October 2011 - May 2014.
Bonn, Germany.
Master thesis: Roitman's theorem for K3 surfaces.
Advisor: Prof. Dr. Daniel Huybrechts.

BSc. in Mathematics (GPA: 4.7, with honors)
Universidad Nacional de Colombia. October 2010
Bogotá, Colombia.
Bachelor thesis: *Abstract elementary classes induced by cotilting classes.*
Advisor: Prof. Dr. Andrés Villaveces.

PREPRINTS

Bridgeland stability conditions on the category of holomorphic triples over curves, arXiv: 1905.04240, with. E. Martínez-Romero and A. Rüffer. (Submitted)

Moduli of Bridgeland semistable holomorphic triples, arXiv: 2102.04995 with D. Bunnett. (Submitted)

Non-symplectic automorphisms of order multiple of seven on a K3 surface, arXiv: 2204.05100 with R. Bell, P. Comparin, J. Li, A. Sarti, A. Zanardini.

SCHOLARSHIPS,
DISTICTIONS

BIGS (Bonn International graduated school of mathematics) scholarship.
University of Bonn.

Honors degree and Master's degree scholarship at Universidad Nacional de Colombia.
Universidad Nacional de Colombia.

CONFERENCES
CONTRIBUTIONS

Satellite ICM 2022 - Integrable systems and geometry of moduli spaces.
Invited speaker (short talk)(cancelled)
Yaroslavl, Russia, July 2022.

Second ECOS-ANID workshop in Algebraic Geometry (online).
Invited speaker

Poitiers, France, July 2021.

ICERM, Women in algebraic geometry (online).
Participant of the group "Automorphisms of K3 surfaces".
Providence, USA, July 2020.

Encuentro de sociedades de matemáticas de Colombia y México.
Bridgeland stability conditions on the category of holomorphic triples over curves.
Invited speaker.
Barraquilla, Colombia, May 2018.

VBAC, Vector bundles on algebraic curves 2017. Bridgeland stability conditions
on the category of holomorphic triples over curves.
Speaker.
Essen, Germany, September 2017.

Women in homotopy theory and algebraic geometry Bridgeland stability conditions on the category of holomorphic triples over curves.
Poster.
Berlin, Germany, September 2016.

SELECTED TALKS   *Projectivity of moduli of Bridgeland semistable holomorphic triples,*
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, June 2022.

Moduli of Bridgeland semistable holomorphic triples.
Arxiv club
Campinas University, June 2021.

Espacios de moduli de triplas holomorfas.
Coloquio de matemáticas.
Universidad de los Andes, April 2021.

Moduli of Bridgeland semistable holomorphic triples.
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, January 2021.

Bridgeland stability conditions on the category of holomorphic triples over curves.
Oberseminar zur Algebra und Zahlentheorie.
Universität Augsburg, July 2018.

Bridgeland stability conditions on the category of holomorphic triples over curves.
Complex algebraic geometry group.
Universita degli studi de Milano, February 2018.

EVENTS
CO-ORGANIZED   **Women in Homotopy Theory and Algebraic Geometry II.**
Berlin, Germany, March 2019.

GRANTS   **Mercator Fellow** DFG project "Neue Entwicklungen in der Theorie der Moduli dekorierter Garben"from Professor A. Schmitt.

Seminars Organization	**ICTP mathematics seminars and basic notions seminars.** ICTP, Trieste, 2019 - 2020. **Algebraic geometry seminar (ICTP-SISSA).** ICTP-SISSA, Trieste, 2019-2020. **Bridgeland stability conditions on derived categories.** Forshungsseminar Komplexe Analysis, Freie Universität Berlin, summer semester 2015.
Research visits	*May 30th-June 3rd 2022*, Freie Universität Berlin, (Host: Prof. Dr. Alexander Schmitt), Berlin, Germany. *September 2021*, Research in pairs at Oberwolfach Research Institute for Mathematics with Dominic Bunnett, Oberwolfach, Germany. *April 25th 2016-April 27th 2016*, Mary Immaculate College, University of Limerick, (Host: Prof. Dr. Bernd Kreussler), Limerick, Ireland.
Teaching Experience	**Algebraic geometry.** Teaching assistant at ICTP, summer semester 2021. **Complex Analysis.** Teaching assistant at ICTP, winter semester 2020. **Algebraic geometry.** Teaching assistant at ICTP, summer semester 2020. **Representation theory.** Teaching assistant at ICTP, summer semester 2020. **Analysis III.** Teaching assistant at the Freie Universität Berlin, winter semester 2018-19. **Analysis III.** Teaching assistant at the Freie Universität Berlin, winter semester 2018-19. **Analysis II.** (In German) Teaching assistant at the Freie Universität Berlin, summer semester 2018. **Homological algebra.** Teaching assistant at Freie Universität Berlin, winter semester 2017-18. **Algebraic geometry I.** Teaching assistant at Freie Universität Berlin, summer semester 2017. **Commutative algebra.** Teaching assistant at Freie Universität Berlin, winter semester 2016-17. **Elementary geometry.** (In German) Teaching assistant at Freie Universität Berlin, summer semester 2016.

Algebra and number theory. (In German)
Teaching assistant at the Freie Universität Berlin, winter semester 2015-16.

Complex analysis.
Teaching assistant at the Freie Universität Berlin, summer semester 2015.

Integral calculus.
Teaching assistant at the Universidad de los Andes in Bogotá, Colombia, winter semester 2010.

CONFERENCES   **BIRS, Moduli, Motives and Bundles. New Trends in Algebraic Geometry** .
Oaxaca, Mexico, September 2022.

New Perspectives on Hyperkähler Manifolds.
Levico Terme, Italy, June 2022.

BIRS, Derived, Birational, and Categorical Algebraic Geometry.
Online, November 2021.

VBAC 2019- GIT, Wall-crossings and Moduli spaces.
Sønderborg, Denmark, June 2019.

Geometry and Physics of Higgs Bundles .
Oberwolfach, Germany, May 2019.

A Workshop on Challenges at the Interface of Hitchin Systems and String Theory.
Stony brook, USA, March 2019.

Hodge Theory, Moduli and Representation Theory.
Stony brook, USA, August 2017.

Women in Homotopy Theory and Algebraic Geometry.
Berlin, Germany, September 2016.

Workshop on New Perspectives on Moduli Spaces in Gauge Theory.
Singapore, Singapore, August 2016.

7th European Congress of Mathematics.
Berlin, Germany, July 2016.

Nordfjordeid summer school: Stability conditions on triangulated categories and geometric applications.
Nordfjordeid, Norway, June 2016.

Spring School: Irregular Hodge Structures and Stability Conditions.
Mainz, Germany, February 2016.

Noncommutative deformations and flops.
Hannover, Germany, January 2016.

Workshop: Derived Categories and Moduli Spaces.
Stavanger, Norway, september 2015.

New Techniques in Geometric Invariant Theory.
Berlin, Germany, September 2015.

Summer School of the IRTG "Moduli and Automorphic Forms".
Siena, Italy, August 2015.

VBAC, Vector Bundles on Algebraic Curves 2014.
Berlin, Germany, Septemner 2014.

Workshop on the Geometry and Physics of Moduli Spaces.
Madrid, Spain, June 2014.

Master class: Around Torelli theorem's for K3 surfaces.
Strasbourg, France, November 2013.

MALOA, model theory semester.
Lyon, France, 5 March - 4 June 2011.

XVII Congreso Colombiano de matemáticas .
Cali, Colombia, August 2009.

SELECTED TALKS   *Ballard-Favero-Katzarkov, the proof of the main theorem part II.*
Seminar zur Algebraischen Geometrie.
Freie Universität Berlin, January 2018.

Factorisation categories I.
Seminar zur Algebraischen Geometrie.
Freie Universität Berlin, November 2017.

Donaldson-Thomas invariants on curves.
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, Decmeber 2016.

Simplification of the category of semistable framed objects.
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, November 2016.

Examples of motivic vanishing cycles.
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, July 2016.

Bridgeland stability conditions on the category of holomorphic triples over curves.
Mary Immaculate College, Univeristy of limerick, April 2016.

Proof of the result of Kac, part I.
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, February 2016.

Lagrangian fibrations on moduli spaces of stable sheaves on a K3 surface.
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, July 2015.

First examples of Bridgeland stability conditions on K3 surfaces
Forschungsseminar Komplexe Analysis.
Freie Universität Berlin, June 2015.

Languages   Spanish (native speaker)
English (fluent)
German (good working knowledge)
Italian (Conversational)

Referees   **Prof. Dr. Alexander Schmitt** (e-mail: alexander.schmitt@fu-berlin.de)
Deparment of Mathematics, Free University of Berlin.
Prof. Dr. Bernd Kreussler (e-mail: bernd.kreussler@mic.ul.ie)
Mary Immaculate College, University of Limerick..
Prof. Dr. Victoria Hoskins (e-mail: v.hoskins@math.ru.nl)
Department of mathematics, Radboud University.
Prof. Dr. Daniel Huybrechts (e-mail: huybrech@uni-bonn.de)
Mathematical Institute of University of Bonn.