# Pedro Núñez | Curriculum Vitae

## **Contact details**

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## Working experience

**Postdoctoral researcher** – *National Taiwan University* Postdoc in the working group of Jungkai Alfred Chen.

**Taipei, Taiwan**September 2023 - Present

## Publications and preprints

• Adapted differentials as a qfh-sheaf.

Mathematische Zeitschrift 304, 68 (2023). DOI:10.1007/s00209-023-03330-6.

Preprint: arXiv:2210.07968.

• A note on semiorthogonal decompositions for Fano fibrations.

Geometriae Dedicata 2216, 20 (2022). DOI:10.1007/s10711-022-00680-z.

Preprint: arXiv:2002.10987.

## Contributed talks

#### Géométrie Algébrique en Liberté XXIX

Title: Semiorthogonal decompositions on Fano fibrations.

2nd BYMAT Conference

Title: Derived categories of Fano varieties and Mori fibre spaces.

Orsay, France

24 May 2022

Madrid, Spain 21 May 2019

Taipei, Taiwan

20 October 2023

#### Seminar talks

#### **NCTS Seminar in Algebraic Geometry**

Title: Indecomposability of derived categories of hyperelliptic manifolds.

Esch-sur-Alzette, Luxembourg

Luxembourg algebraic geometry seminar

Title: Adapted differentials on Campana orbifolds.

22 March 2023

NCTS Seminar in Algebraic Geometry (online)

Title: Adapted differentials on Campana orbifolds.

**Taipei, Taiwan** *6 February* 2023

Red de Doctorandos en Matemáticas UCM (online)

Madrid, Spain

Title: Categorías derivadas y geometría birracional.

22 March 2022

#### **Education**

#### **PhD in Mathematics** – *University of Freiburg*

Categorical aspects of Campana orbifolds, supervised by Stefan Kebekus.

**Freiburg, Germany** September 2019 - July 2023

Grade: magna cum laude

Master in Mathematics – University of Bonn

Bonn, Germany

Average: 1.2 (German grading system.)

October 2017 - July 2019

**Bachelor in Mathematics** – Complutense University and LMU Munich (Erasmus) Madrid, Spain Average: 8.34 (Spanish grading system.) September 2013 - August 2017

# Teaching experience

**University of Freiburg Elementargeometrie** – Assistant Lecturer: Annette Huber-Klawitter. Summer Term 2023 **Riemannsche Flächen** – Assistant\* **University of Freiburg** *Winter Term* 2022/2023 Lecturer: Stefan Kebekus. **Elementargeometrie** – Assistant **University of Freiburg** Lecturer: Annette Huber-Klawitter. Summer Term 2022 **Algebra und Zahlentheorie** – *Assistant* **University of Freiburg** Lecturer: Annette Huber-Klawitter. Winter Term 2021/2022 Einführung in die Algebra – Tutor\*\* **University of Bonn** Winter Term 2018/2019 Lecturer: Jan Schröer. **University of Bonn** 

Lineare Algebra für Informatik und Lehramt – Tutor

Partial Differential Equations Summer School

Lecturer: Thoralf Räsch.

\*The job of an assistant in Germany is to create exercise sheets and coordinate the exercise classes.

Summer Term 2018

Lisbon, Portugal

## Summer schools, workshops and conferences attended

Geometric and Arithmetic Frontiers of Orbifolds II IRMA - Université de Strasbourg	<b>Strasbourg, France</b> 5 to 9 April 2023
Komplexe Analysis — Differential and Algebraic methods in Kähler space Mathematisches Forschungsinstitut Oberwolfach	ces MFO, Germany 9 to 14 April 2023
Crash Course Condensed Mathematics University of Freiburg	Freiburg, Germany 13 to 17 March 2023
<b>Abschlusskolloquium of GK "Cohomological Methods in Geometry"</b> <i>University of Freiburg</i>	<b>Freiburg, Germany</b> 14 to 15 July 2022
Birational Geometry conference EPFL	Lausanne, Switzerland 13 to 17 June 2022
Géométrie Algébrique en Liberté XXIX Laboratoire de Mathématiques d'Orsay	<b>Orsay, France</b> 23 to 27 May 2022
Workshop Higher Algebra Technical University of Darmstadt	Darmstadt, Germany 16 to 18 March 2022
New Techniques in Resolution of Singularities (online participant)  Mathematisches Forschungsinstitut Oberwolfach	<b>MFO, Germany</b> 24 to 30 October 2021
Workshop on K-theory, algebraic cycles and motivic homotopy theory Isaac Newton Institute for Mathematical Sciences	<b>Cambridge, UK</b> 13 to 17 January 2020
o-Minimal Structures in Algebraic Geometry Summer School University of Freiburg	<b>Freiburg, Germany</b> 9 to 13 September 2019
Moduli and Stability conditions Summer School University of Hannover	<b>Hannover, Germany</b> 29 July to 2 August 2019
2nd BYMAT Conference ICMAT	<b>Madrid, Spain</b> 20 to 24 May 2019
Geometry Summer School Utrecht University	Utrecht, Netherlands 14 to 25 August 2017

<sup>\*\*</sup>The job of a tutor in Germany is to grade homework and discuss its solutions in an exercise class.

Fundação Calouste Gulbenkian 4 to 8 July 2016

**Dynamical Systems Summer School** 

Fundação Calouste Gulbenkian

**Algebraic Geometry Summer School** 

Fundação Calouste Gulbenkian

Lisbon, Portugal

6 to 10 July 2015

Lisbon, Portugal

14 to 18 July 2014

## Scholarships and funding

Geometric and Arithmetic Frontiers of Orbifolds II

Strasbourg, France

Funded by IRMA to attend their workshop.

June 2023
Oberwolfach, Germany

Oberwolfach Leibniz Graduate Students (OWLG)

Funded by MFO to attend the Komplexe Analysis workshop at Oberwolfach.

April 2023

2nd BYMAT Conference

Madrid, Spain

Funded by ICMAT to attend their conference.

May 2019

Geometry Summer School

Utrecht, Netherlands

Funded by Utrecht University to attend their summer school.

August 2017
Munich, Germany

**Erasmus Scholarship**Studied at the LMU as an Erasmus exchange student.

Course 2016/2017

**Dynamical Systems Summer School** 

Lisbon, Portugal

Funded by the Gulbenkian Foundation to attend their summer school.

July 2015

## Languages

Spanish: Native speaker

English: C1 level German: C1 level

Mandarin: B1 level

IELTS with score 8 Goethe-Zertifikat C1

HSK3 + HSKK Basic

## Other interests and activities

#### World Space Observatory – Ultraviolet

Internship at the WSO-UV space telescope project

Madrid, Spain

1 to 31 July 2015

- Analysis of time series from ultraviolet spectroscopy measurements.
- o Director: Ana I. Gómez de Castro.

**Astronomy** – International Astronomical Youth Camp 2014

Weyer, Austria

Observational astronomy and weather modeling with Matlab.

20 July to 9 August 2014

**Programming** – *Android application development I, II* and *III* Courses taken at TEIDE Centros de Formación.

Madrid, Spain

2013

**Piano** – Escuela de música y danza

Madrid, Spain

Piano, musical language and its theory, harmony and chamber music.

2005 to 2012