Ayush Jaiswal **Last update: February 24, 2023**

Contact Information

Indian Institute of Technology, Gandhinagar
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Research Background

Algebraic Geometry
More specifically, I think about parabolic bundles and d-holomorphic bundles on Klein surfaces.

Education

Indian Institute of Technology, Gandhinagar(IITGn), India 2017–2023 (expected)

- Ph.D. in Discipline of Mathematics, CPI: **7.94** – via 44 credits.
  - Thesis: *On d-holomorphic connections and gauge theoretic aspects of parabolic bundles over Klein surface*
- Advisor: Prof. Sanjaykumar Amrutiya.

Indian Institute of Technology, Kanpur(IITK), India. 2013–2015

- M.Sc., Mathematics. CPI: **7.2** – via 80 credits

Technical Skills

- *Programming Languages*: C/C++, Python
- *Technical Softwares*: MATLAB, Git-hub

Research Interests

Algebraic Geometry

- Parabolic bundles
- d-holomorphic bundles

Selected Publications/Preprints

1. Sanjay Amrutiya, Ayush Jaiswal, "*On d-holomorphic connections*", arXiv preprint arXiv : 2208:04354; 2022.
2. Sanjay Amrutiya, Ayush Jaiswal, "*A gauge theoretic aspects of parabolic bundles over Klein surfaces*", arXiv preprint arXiv : 2202:06210; 2022.

Professional Achievements/Awards/ Scholarships

- Secured 2nd position(merit based) in during B.Sc.(IInd year) 2010–2011
- *Joint Admission Test for Masters(JAM)* organised by *Indian Institute of Technology, Delhi(IITD)* 2013
- *Graduate Aptitude Test for Engineering(GATE)* organised by *Indian Institute of Technology, Kanpur(IITK)* 2015
- *Graduate Aptitude Test for Engineering(GATE)* organised by *Indian Institute of Science, Bangalore(IISC)* 2016
- *Junior Research Fellow(JRF)* organised by *Council of Scientific and Industrial Research(CSIR)* 2015,2016

Workshops/ Conferences attended

- *Moduli of bundles and related structures* at ICTS, Bangalore, India.
  10 February–14 February, 2020
- Workshop on *Characteristic classes and cobordism* at IIT Bombay, Powai, Maharashtra, India.
  4 March–15 March, 2019
- AIS(Advanced Instructional School) on *Linear Algebraic Groups* at IIT Bombay, Powai, Maharashtra, India. 24 June–13 July 2019
- AIC(Advanced Instructioncal Course) on *Commutative Algebra* in online mode.
  2 January–2 May, 2021
- AIS(Advanced Instructional School) on *Basic Algebraic Geometry* at IISER Pune, Pune, Maharashtra, India. 25 June–14 July, 2018

Delivered Talks/Poster Presentations

1. On d-holomorphic connections(Talk), *Conference on Algebraic Geometry*, Harish Chandra Institute, Prayagraj, India. December 12-16, 2022.
2. On d-holomorphic connections(Poster presentation), *Vector bundles in Chennai*, Department of mathematics, IIT Madras, Chennai, India. February 6-11, 2023.

Teaching Experience

- Graduate Teaching Fellow for the course MA 102, Mathematics II(Linear Algebra and Differential Equations) at IIT Gandhinagar, Gujarat, India Spring semester, 2018–2019
- Graduate Teaching Fellow for the course MA 504, Linear Algebra at IIT Gandhinagar, Gujarat, India Autumn semester, 2019–2020
- Graduate Teaching Fellow for the course MA 102, Mathematics II(Several Variable Calculus and Complex Analysis) at IIT Gandhinagar, Gujarat, India Spring semester, 2019–2020
