



Name: Dr. Gaurab Tripathi [GT]

Designation: Assistant Professor in Mathematics (Dept: Arts and Science) in St. Xaviers College

Academic qualifications: - Passed Madhyamik and Higher secondary under West Bengal board from South Point High School. Graduated from Indian Statistical Institute in Mathematics (Hons). Completed Masters (Amla Laurea) from Padova University. Awarded Doctor of Philosophy in Mathematics from Jadavpur University.

Research Work: Area of interest: Commutative and computational perspectives of Algebra, Algebraic Geometry, Algebraic Number Theory.

Publications: Published/Accepted:

1. A.K. Roy, I. Sengupta, G. Tripathi, Minimal graded free resolutions for monomial curves defined by almost arithmetic sequences, *Communications in Algebra* 45(2), 2017, pp. 521-551.
2. J. Saha, I. Sengupta, G. Tripathi, Ideals of the form $I_{\{1\}}(XY)$, *Journal of Symbolic Computation* 91(2019), 17-29; J. Saha, I. Sengupta, G. Tripathi, Primary decomposition and normality of certain determinantal ideals; to appear in *Proc.- Math. Sciences*.
3. J. Saha, I. Sengupta, G. Tripathi, Transversal Intersection of Monomial Ideals; to appear in *Proc.- Math. Sciences* J. Saha, I. Sengupta, G. Tripathi, Quadrics defined by skew-symmetric matrices}, *International J. Algebra* 11(8)(2017) 349-356.
4. J. Saha, I. Sengupta, G. Tripathi, Grobner Basis for $I_{\{1\}}(XY)$, *EACA* 2016; pp. 149 - 152 (2016). Communicated: J. Saha, I. Sengupta, G. Tripathi, Transversal Intersection and Sum of Polynomial ideals, arXiv:1611.04732 [math.AC].
5. J. Saha, I. Sengupta, G. Tripathi, Regular Sequences from Determinantal Conditions, arXiv:1703.01756 [math.AC].
6. (With J.Saha , I. Sengupta) *Transversal Intersection and sum of Polynomial Ideals*; *Journal of Ramanujan Mathematical Society*, 38, No 1, 2023 , 33-46
7. (With J.Saha, I.Sengupta) *d-sequence and Regular sequence of Quadrics*; *Proc. Indian Acad. Sci. (Math. Sci.)* (2022) 132:75

6. Teaching Experience: Complex numbers and Vector calculus Complex Analysis to Engineering Students in Jadavpur University. Teaching in Xavier's: Taught Business Mathematics and Statistics to B.Com Students from 2015 July -2018 December. Teaching Mathematics honours and ancillary courses from January 2019 onwards.

Academic achievements:

1. Qualified Mathematical Olympiad at regional level and stood fourth in 2000.
2. Qualified Mathematical Olympiad at regional level and stood first in 2001.
3. Qualified ISI, CMI entrance tests, WBJEE in 2002 Qualified CMI, ISI exams for masters and TIFR for Phd programmes. Qualified NET examination and stood 14th (A.I.R.) and was shortlisted for interview for Shyama Prasad Mukherjee scholarship.

Awards:

1. Erasmus Mundus fellowship for Masters. N.B.H.M. fellowship for PhD. CSIR fellowship for qualifying NET Examination.

Workshops Attended (Selected):

- a) Exposure on Fermat's Last Theorem in Bordeaux 1 , 2005.
- b) Sattelite Conference in Rings and Near Rings, NEHU, 2010.
- c) ATM school in Commutative Algebra, IIT Mumbai,2011.
- d) ATM school in Commutative Algebra , Neemrana,2012.
- e) CAAG, in Pondicherry University, 2012.
- f) ATM school in Commutative Algebra, CMI, 2012.
- g) AIS school in Basic Algebra, as a tutor in Nanded ,2014.
- h) NCM workshop in IIT Mumbai, 2018.

Talks given:

1. On regular local rings in NEHU, International conference.
2. On primary decomposition of certain Determinantal Ideals in CAAG held in 2016, IISER, Mohali.
3. On Graphs in ICMAAM, Jadavpur University.