

Curriculum Vitae

Bikramaditya Sahu

Contact

Bikramaditya Sahu
Assistant Professor
Department of Mathematics
National Institute of Technology, Rourkela
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Education

- 2018 Ph.D
NISER Bhubaneswar, India
Advisor : Dr. Binod Kumar Sahoo
Thesis title : Blocking sets of certain line sets in $PG(3, q)$
- 2013 Master of Science in Mathematics
IIT Bombay, Mumbai, India
- 2010 Bachelor of Science in Mathematics
Sambalpur University, Odisha, India

Experience

- Assistant professor, Department of Mathematics at National Institute of Technology, Rourkela since 12th June 2020.
- Post-doctoral fellow, Department of Mathematics at Indian Institute of Science, Bangalore from 15th January 2019 to 31st March 2020.

Research Interests

Algebraic Combinatorics, Finite Geometry

List of Publications

- K. L. Patra, B. K. Sahoo and Bikramaditya Sahu, Minimum size blocking sets of certain line sets related to a conic in $PG(2, q)$, *Discrete Mathematics* 339 (2016), 1716 - 1721.

- B. De Bruyn, B. K. Sahoo and Bikramaditya Sahu, Blocking sets of tangent and external lines to a hyperbolic quadric in $PG(3, q)$, *Discrete Mathematics* 341 (2018), 2820 - 2826.
- B. K. Sahoo and Bikramaditya Sahu, Blocking sets of tangent and external lines to a hyperbolic quadric in $PG(3, q)$, q even, *Proc. Indian Acad. Sci. Math. Sci.* 129 (2019), no. 1, 14 pp.
- B. De Bruyn, B. K. Sahoo and Bikramaditya Sahu, Blocking sets of tangent lines to a hyperbolic quadric in $PG(3, 3)$, *Discrete Applied Mathematics*, 266 (2019), 121 - 129.
- B. K. Sahoo and Bikramaditya Sahu, Blocking sets of certain line sets to a hyperbolic quadric in $PG(3, q)$, *Advances in Geometry* 19 (2019), no 4, 477 - 486.
- P. Pradhan and Bikramaditya Sahu, A characterization of the family of secant lines to a hyperbolic quadric in $PG(3, q)$, q odd, *Discrete Mathematics*, accepted.

Talk delivered

- A characterization of the family of secant lines to a hyperbolic in $PG(3, q)$, q odd, Algebra-Combinatorics seminar, October 04, 2019 at Department of Mathematics, IISc Bangalore, India.
- Blocking sets of certain line sets in $PG(2, q)$, In-House Symposium, March 28, 2019 at Department of Mathematics, IISc Bangalore, India.
- Blocking sets of certain line sets in $PG(3, q)$, Ph.D Defence, December 24, 2018 at NISER Bhubaneswar, India.
- Blocking sets of certain line sets in $PG(3, q)$, Pre-Synopsis seminar, April 05, 2018 at NISER Bhubaneswar, India.
- Blocking sets of tangent lines to a hyperbolic quadric in $PG(3, 3)$, December 17, 2017 at the National Conference on Engineering Mathematics, IIT Kharagpur, India.
- Blocking sets of certain line sets to a hyperbolic quadric in $PG(3, q)$, q even, June 27, 2017 at the Second Malta Conference in Graph Theory and Combinatorics, University of Malta, Malta.
- Blocking sets in $PG(2, q)$ with respect to a conic, October 17, 2016 at NISER Bhubaneswar, India.
- Minimal blocking sets in $PG(2, q)$, State of the Art seminar, July 30, 2015 at NISER Bhubaneswar, India.

- Witt's Cancellation Theorem of quadratic spaces, April 21, 2014 at NISER Bhubaneswar, India.
- Kunnetth Theorem on homology of modules, November 21, 2013 at NISER Bhubaneswar, India.

Awards and Scholarships

- Qualified NBHM Post-Doctoral Fellowship, June 2018 session.
- Qualified the Joint CSIR-UGC National Eligibility Test for Junior Research Fellowship and eligibility for Lectureship, June 2015.
- CSIR-UGC-NET eligibility for Lectureship, June 2014.
- Qualified the Graduate Aptitude Test in Engineering (GATE), 2014.
- Qualified the Graduate Aptitude Test in Engineering (GATE), 2013.
- Qualified Joint Admission Test for M.Sc.(JAM), 2011 for admission in IITs.
- Qualified Joint Admission Test for M.Sc.(JAM), 2010 for admission in IITs.

Conferences/Workshops Attended

- Combinatorial Models in Representation Theory, NCM Workshop, November 04 - 16, 2019, The Institute of Mathematical Sciences, Chennai, India.
- Group Algebras, Representations and Computation, October 14 - 23, 2019, International Centre for Theoretical Sciences, Bangalore, India.
- NASI-TIMC Workshop on Coxeter Groups, December 17 - 19, 2018, Department of Mathematics, IIT Patna, India.
- National Conference on Engineering Mathematics, December 16 - 17, 2017, Department of Mathematics, IIT Kharagpur, India.
- The Second Malta Conference in Graph Theory and Combinatorics, June 26 - 30, 2017, Department of Mathmatics, University of Malta, Malta.
- National Workshop on Matrices and Graphs, January 02 - 07, 2017, Department of Mathematics, Sikkim Manipal Institute of Technology, Sikkim, India.
- Annual Foundation School - Part III, June 20 - July 16, 2016, IISER Thiruvananthapuram, India.

- Annual Foundation School - Part II, May 11 - June 06, 2015, IISER Thiruvananthapuram, India.
- Annual Foundation School - Part I, December 01 - 27, 2014, School of Mathematical Sciences, NISER Bhubaneswar, India.

Research Visit

- Dr. Binod Kumar Sahoo, School of Mathematical Sciences, NISER Bhubaneswar, India during January 06 - 24, 2020.
- Dr. Binod Kumar Sahoo, School of Mathematical Sciences, NISER Bhubaneswar, India during June 10 - 30, 2019.
- Prof. N. S. N. Sastry, Statistics and Mathematics Unit, Indian Statistical Institute, Bangalore Centre, India during May 16 - June 18, 2016.

Teaching Assistant

- Tutor for the Algebra-II course in the Department of Mathematics, IISc Bangalore during January 2020 to March 2020.
- Tutor for the Field Theory course at the AFS-III held at NISER Bhubaneswar during July 01 - 15, 2019.
- Mathematics-I (Undergraduate), Fall- 2016, NISER Bhubaneswar (Teaching Assistant)
- Mathematics-II (Undergraduate), Spring- 2016, NISER Bhubaneswar (Teaching Assistant)

Other responsibilities

- Reviewer of published papers (AMS MatSciNet)
- Computer Lab-in charge, Department of Mathematics, NIT Rourkela (2020-2021)

References

- Dr. Binod Kumar Sahoo
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- **Prof. Bart De Bruyn**
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- **Dr. Kamal Lochan Patra**
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