# **Curriculum Vitae**



Dr. Bilal Ahmad Chat

Designation: Assistant Professor at Islamic University of Science and Technology

Awantipora Pulwama J&K-India.

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Research field: Spectral Graph Theory.

# **EDUCATIONAL QUALIFICATION**

|     | Examination<br>Passed | Batch     | Grade         | Board/University      | Subject     |
|-----|-----------------------|-----------|---------------|-----------------------|-------------|
| 01. | Ph. D.                | 2013-2016 | Qualified     | University of Kashmir | Mathematics |
| 02. | SET                   | 2016      | Qualified     | UGC                   | Mathematics |
| 03. | M.Sc.                 | 2010-2011 | I (Maths 71%) | University of Kashmir | Mathematics |
| 04. | B. Ed                 | 2012      | 1(Maths 75%)  | University of Kashmir | All         |
| 05. | B.Sc.                 | 2007-2009 | I(Maths 77%)  | University of Kashmir | Non-Medical |
| 06. | Intermediate          | 2005      | I(Maths 77%)  | J&K BOSE              | Non-Medical |
| 07. | Matriculate           | 2003      | I (Maths 99%) | J&K BOSE              | All         |

#### FIELD OF SPECIALIZATION

- (i) Graph Theory
- (ii) Spectral Graph Theory

#### COURSES TAUGHT AT P.G. & U.G. LEVELS

- 1. Complex Analysis
- 2. Algebra
- 3. Matrix Theory
- 4. Graph Theory
- 5. Linear Algebra
- 6. Real Analysis
- 7. Differential Equations

## Projects: (02)

- 1. **Title:** Laplacian Energy of Graphs and Digraphs.

  Collaborative Research project (CRS-Project) as Principal Investigator (On-Going).
- 2. **Title:** Study of basic hypergeometric functions and their generalization with reference to quantum calculus (CRS-Project) as Co-Principal Investigator (On-Going).

# Workshops/Conferences

# International workshop/conferences abroad:

01. Attended "CIMPA Research School-Graph Theory (CIMPA-17) at Lebanese University Faculty of Sciences 1, Doctoral School of Science and Technology in Beirut Lebanon on 13-22 February 2017 (Supported by CIMPA Research School).

#### International/National conferences in India

#### **PRESENTATIONS**

- 01. Chat BA, (2020): Paper Presented titled 'On the skew Laplacian spectral radius of a digraph' in international conference on Graph Connections(ICGC)-2020 organized by Bishop Chulaparambil Memorial College, Kottayam.
- 02. Chat BA, Ganie HA, Bhat AA, Bhat YA, Lone MA (2020): Paper Presented titled 'On the skew Laplaian spectral radius of a digraph' in international webinar on the Role of Applied Mathematics in Present Global Crises 5<sup>th</sup> -7<sup>th</sup> August, 2020 organized by Department of Applied Mathematics with Oceanology and Computer Programming Vidyasagar University, Midnapore-721102, West Bengal, India.

- 03. Chat BA(2020): Paper Presented titled "Skew Laplacian energy of a weighted digraph" in Five-Days International Conference on Recent Trends in Mathematics and its Applications to Graphs, Networks and Petri Nets (ICRTMA-GPN-2020), jointly organized by School of Computational and Integrative Sciences, JNU, New Delhi 110067 and Vijnana Parishad of India (Society for Applications of Mathematics)
- 04. Chat BA (2016): Paper Presented at International Conference on Mathematics for Brain studies titled "The condition for a sequence to be potentially A\_{L, M} graphic" at Nodia International University New Delhi- India February 1-3,2016.
- 05. S. Pirzada and Chat BA (2016): Presented a Paper titled "Potentially Graphical Sequences of Split Graphs" on Research Promotion Workshop On Introduction to Graph and Geometric Algorithms 18-20 May 2015, the workshop is sponsored by National Board of Higher Mathematics Department of Atomic Energy Government of India.

# Workshop:

- 01. Attended "Soft Computing Research Society (SCRS)" in collaboration with Islamic University of Science and Technology(IUST) Awantipora, July 01-July 06, 2020.
- 02. Attended "the Webinar on Accelerate Research Planning Using Elsevier, Science Direct and Mendeley" on 4<sup>th</sup> May 2020.
- 03. Attended "Workshop for Principal Investigators on Collaborative Research Scheme" on 16th July 2019 at AICTE Auditorium, New Delhi organized by National Project Implementation Unit (NPIU) in association with World Bank under TEQIP-III.
- 04. Attended 'Summer Training Programme on Advanced Pedagogy and Digital Tools' from 13<sup>th</sup> May-17<sup>th</sup> May 2019 held at IIT-Kanpur.
- 05. National workshop on "Attended advanced level workshop on Non-Linear Functional Analysis and its Applications sponsored by DST, Govt. of India held at University of Kashmir 21-29 Oct 2013.
- 06. Workshop on "Attended Workshop on Mathematica and Related Software during 24<sup>th</sup> February to 2<sup>nd</sup> March 2014 at Amarsingh College Srinagar.
- 07. Technical Education Quality Improvement Program (TEQIP) Workshop on Faculty Induction Program organized at IIT Hyderabad during 30 January- 03 February, 2018.
- 08. Two day Workshop on Outcome Based Education organised under TEQIP-III Project by Islamic University of Science and Technology on 26th-27th March 2018.

- 09. Attended Advanced Level Workshop on Nonlinear Functional Analysis & its Applications sponsored by DST, Govt. of India held at University of Kashmir during 21-29 Oct. 2013.
- 10. Attended 3-day Lecture Program on Mathematical Modeling of Biological Systems organized by the department of Mathematics University of Kashmir, Srinagar under National Network for Mathematical and Computational Biology (NNMCB) during 02-04 April 2015.
- 11. Attended Advanced Instructional School/Workshop National Centre for Mathematics (A Joint Centre of TIFR and IIT Bombay) on Naïve Set Theory & its Applications-2015" held at University of Kashmir during April 13-May 2, 2015.
- 12. Attended an international conference ICRAMS-2016 at Bundelkhand University, Jhansi-India in 22-23 March 2016.

## **Teaching Experience:**

- 01. Worked as an Assistant Professor (contract) at Department of Mathematics Central University of Kashmir Srinagar from 7<sup>th</sup> Dec 2016 to 13<sup>th</sup> January 2018.
  - 02. Worked as an Assistant Professor under (TEQIP-III) at Department of Mathematical Sciences, Islamic University of Science and Technology, Awantipora, J&K-india joining on 15<sup>th</sup> January 2018 to 5<sup>th</sup> March FN.
  - 03. Working as an Assistant Professor Department of Mathematical Sciences, Islamic University of Science and Technology, Awantipora, J&K-india joining on 5<sup>th</sup> March AN 2021 to Till Date

# **Published/Accepted Publications:**

- 01. Bilal A. Chat and S. Pirzada, On Potentially Graphical Sequences of G–E(H), Analysis in Theory and Applications, 34 (2) (2018) 187-198. (Scopus)
- 02. S. Pirzada and Bilal A. Chat, The condition for a sequence to be Potentially  $A_{L}$ , M- Graphic, Tranctions on Combinatorics, 6(1) (2017) 21-27. (ESCI)
- 03. S. Pirzada, Bilal A. Chat and F. A. Dar, Graphical sequences of some family of induced subgraphs, J. Algebra Comb. Discrete Appl. 2, 2(2015) 95-109. (Scopus)
- 04. Bilal A. Chat, S. Pirzada and A. Ivanyi, Recoginition of split graphs, Acta Univ. Sapientiae, Informatica, 6, 2 (2015) 199-233. (ESCI)
- 05. S. Pirzada and Bilal A. Chat, Potentially graphical sequences of split graphs, Kragujevac Journal of Mathematics, 38, 1 (2014) 73-81. (Scopus)
- 06. Hilal A. Ganie, Bilal A. Chat and S. Pirzada, Signless Laplacian energy of a graph and energy of a line graph, Linear Algebra Applications, 544 (2018) 306-324. (Elsevier)
- 07. Bilal A. Chat, U. Samee and S. Pirzada, A sufficient condition for r-graphic sequences to be potentially K^{(r)}\_{l,m}, J. Disc. Math. Sc. Cryp. 2019. (Scopus)
- 08. S. Pirzada, Bilal A. Chat and U. Samee, On multigraphic and potentially multigraphic sequences, Acta. Univ. Sap. Informatica, 9 (1) (2017) 35-48. (ESCI)

- 09. Hilal A. Ganie and Bilal A. Chat and S. Pirzada, Skew Laplacian energy Digraphs, Afrika Mathematica, 29 (2018) 499-507.(Springer)
- 10. Hilal A. Ganie, Bilal A. Chat and S. Pirzada, On skew Laplacian spectra and skew Laplacian energy of digraphs, Kragujevec J. Mathematics, 43, 1 (2019) 87-98. (Scopus)
- 11. Hilal A. Ganie and Bilal A Chat, Bounds for the energy of weighted graphs, Discrete Applied Mathematics, 268(2019) 91-101. (Elsevier)
- 12. Shabir. A and Bilal A. Chat, Some fixed point theorems for single valued and set valued maps, J. Ramanujan Math. Soc. 34, No.1 (2019) 97–107. (SCIE).
- 13. Bilal A. Chat, Hilal A. Ganie and S. Pirzada, Bounds for the skew Laplacian spectral radius of oriented graphs, Carpathian J. Math. 35 (1) (2019) 31-40. (SCI)
- 14. Hilal A. Ganie, S. Pirzada, Bilal A. Chat and X. Li, On Skew Laplacian Spectrum and Energy of Digraphs, Asian European Journal of Mathematics, Index in Web of Science (SCIE), (Scopus) (To appear). (Scopus)
- 15. S. Pirzada, Hilal A. Ganie and Bilal A. Chat, On the real and or integral spectrum of Digraphs, Matrices and operators (To appear). (SCIE)

## **Submitted Papers:**

- 01. Bilal A. Chat, Hilal A. Ganie and S. Pirzada, Skew Laplacian energy of a weighted digraph, Submitted to Afrika Mathematika (1-04-2020).
- 02. Bilal A. Chat, U. Samee and S.Pirzada, Bounds for the skew Laplacian energy of weighted digraphs, Submitted to Special Matrices (Dec, 2018).
- 03. Bilal A. Chat, Skew Laplacian Energy of Digraphs, Submitted to Afrika Mathematika(April 2018)
- 04. Bilal A. Chat, Hilal A. Ganie, Altaf A. Bhat, Mehraj A. Lone, Younus A Bhat, On the skew Laplacian spectral radius of a digraph, Submitted to Discrete Mathematics, Algorithms and Applications(04, July 2020)

## Membership:

01. Kashmir Mathematical Society (KMS)

#### PERSONAL DETAILS

**FATHER'S NAME:** Nazir Ahmad Chat

**Mothers Name** : Habla Akhter

**DATE OF BIRTH** : 06-03-1988

**CORRESPONDENCE ADDRESS:** Department of Mathematical Sciences IUST Awantipora Pulwama.

PERMANENT ADDRESS : Chatapora Pulwama J&K-India.

**Pin code** : 192301

# **References:**

Prof. S. Pirzada (Research Supervisor)

Professor and Former Head, Department of Mathematics, University of Kashmir, J&K, INDIA.

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I vouch for the authenticity of the aforementioned facts.

Pulwama

Date: 24/09/2020

197 p

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