Mostafa Einollahzadeh

E–mail: `m_einollahzadeh@iut.ac.ir`

PERSONAL DATA

- Birth Date: June 15, 1987.

- Country of Citizenship: Iran.

RESEARCH INTERESTS

- Algebra: Algebraic Geometry, Commutative Algebra.

- Graph Theory and Combinatorics: Algebraic Graph Theory.

ACADEMIC BACKGROUND

Ph.D.   **Sharif University of Technology**, Tehran, Iran.
Doctor of Philosophy in Algebraic Geometry, September, 2017.
Title of Thesis: Tensor Categories Equipped with General Fiber Functors.
Cumulative GPA: 19.32 out of 20.
My Supervisor: Professor Amir Jafari.

M.S.   **Sharif University of Technology**, Tehran, Iran.
Master of Science in Mathematics, 2008-2009.
Title of Thesis: Systems of Rational Quadratic Forms.
Cumulative GPA: 19.68 out of 20.
My Supervisor: Professor Mohammad Gholamzadeh.

B.S.   **Sharif University of Technology**, Tehran, Iran.
Bachelor of Science in Mathematics, June, 2005-2008.
Cumulative GPA: 17.99 out of 20.

WORK EXPERIENCEs

- Assistant Professor, Isfahan University of Technology, Isfahan, Iran, 2019-.

PUBLICATIONS and PREPRINTS

1. Einollahzadeh, M., & Nematollahi, M. A. (2024). A Short Proof of Haemers' Conjecture on the Seidel Energy of Graphs. Linear Algebra and its Applications.

2. Einollahzadeh, M. (2023). Minimum trace norm of real symmetric and Hermitian matrices with zero diagonal. arXiv preprint arXiv:2309.14958.

3. Einollahzadeh, M., & Nematollahi, M. A. (2022). An improved lower bound for the Seidel energy of trees. Discrete Applied Mathematics, 320, 381-386.

4. Einollahzadeh, M., & Karkhaneei, M. M. (2021). On the lower bound of the sum of the algebraic connectivity of a graph and its complement. Journal of Combinatorial Theory, Series B, 151, 235-249.

5. Akbari, S., Einollahzadeh, M., Karkhaneei, M. M., & Nematollahi, M. A. (2020). Proof of a conjecture on the Seidel energy of graphs. European Journal of Combinatorics, 86, 103078.

6. Jafari, A., & Einollahzadeh, M. (2018). Tannakian formalism for fiber functors over tensor categories. Periodica Mathematica Hungarica, 77(1), 1-26.

HONORS

- I won the **Silver Medal** in the "International Mathematical Olympiad", when I was a high school student, 2005.

- Received the **First Prize** in "International Mathematics Competition For University Students", for two years, 2006,2008.

- I won the **Gold Medal** in the "Mathematics Competition for Undergraduate University Students". This Competition is held annually by the **Iranian Mathematical Society**, and the participants are the distinguished students from the universities throughout the country, 2006.

- Received the **First** place in the **Nationwide Entrance Examination** for the MS degree, in the field of mathematics, 2008.

TEACHING EXPERIENCES

1. **Graph Theory** (Isfahan University of Technology, 2023)

2. **Advanced Algebra** (Isfahan University of Technology, 2022)

3. **Algebraic Topology** (Isfahan University of Technology, 2019)

4. **Basic Abstract Algebra** (Sharif University of Technology, 2018)

5. **Introduction to Hyperbolic Geometry** (Sharif University of Technology, 2018)