Shu LI

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Education & Research Experience

PhD in Computer Science

2023–Present   ENS, PSL University & INRIA, Paris. Supervisor: Ana Bušić
Thesis: Learning in dynamic matching models

MSc in Mathematics

2020–2023   Shandong University of Technology. Supervisor: Jianfeng Wang
Thesis: On the Matrix-Tree Theorems of Graphs. Defended: May 2023.

BSc in Mathematics and Applied Mathematics

2015–2019   Shandong University of Technology

Publications & Preprints

Journals

2023   **Yet more elementary proof of Matrix-Tree Theorem for signed graphs**
S. Li and J. Wang. Algebra Colloquium. DOI:10.1142/S1005386723000408

2023   **On Graphs with Small Ranks: Old and New Results**
S. Li, Z. Stanic and J. Wang. Advances in Mathematics(China). DOI:10.11845/sxjz.2022006a

2003   **Matrix-Tree Theorem of digraphs via signless Laplacians**
S. Li, L. Lu, J. Wang and W. Wang. Linear Algebra and its Application. DOI:10.1016/j.laa.2022.10.027

2017   **Equivalence Relation and Function**
S. Li and H. Li.

Preprints

A graph discretization of vector Laplace operator
S. Li, L. Lu and J. Wang. arXiv:2312.05754

Matrix-Tree Theorems for Complex Unit Gain Networks
S. Li, J. Wang, M. Dehmer and M. Brunetti.

Conference Presentations & Seminars

2024 **A Brief Survey on the Matrix-Tree Theorems of Graphs**
Argo Seminar
Paris, France

2023 **On the Matrix-Tree Theorems of Graphs**
The Third SDUT Postgraduate Academic Forum
Zibo, China

2022 **On graphs with small ranks: old and new results**
The 10th Int'l Combinatorics and Graph Theory Conference (CMS-CGT2022)
Harbin, China

2022 **A Survey on Matrix-Tree Theorem of Graphs**
The 9th Int'l Symposium on Graph Theory and Combinatorial Algorithms (ORSC-GTCA2022)
Hangzhou, China

Academic Service

Editor

2025-Present   Journal of Advances in Engineering and Technology

Peer review

IEEE internet of things magazine
Asian Journal of Mathematics and Computer Research
2025   ICECET, GPS, ICIC

Professional Memberships

2024-Present   Société Mathématique de France(SMF)
2024-Present   Société informatique de France(SiF)
2024-Present   Société de Mathématiques Appliquées et Industrielles (SMAI)