



Maryam Mojarab

Assistant Professor

Faculty : Mathematics, Statistics and Computer Science

Departments : Mathematics and its applications

Phone : +9854 - 31136371

Email : ma_mojarab@math.usb.ac.ir

Address : Dept.of Mathematics and its applications, Faculty of Mathematics, Statistics and Computer Science, University of Sistan and Baluchestan, Daneshgah Ave., Zahedan, Iran.

Education

- ✓ B.Sc, Applied Mathematics, Ferdowsi University of Mashhad - 2006
- ✓ MS, Applied Mathematics - Numerical Analysis, Ferdowsi University of Mashhad - 2008
- ✓ PhD, Applied Mathematics - Numerical Analysis, Ferdowsi University of Mashhad - 2014
- ✓ PhD, Applied Mathematics - Numerical Analysis, Ferdowsi University of Mashhad - 2014

Courses

- | | |
|---|---|
| 1. Numerical linear algebra | 2. Differential equations |
| 3. Topics on numerical methods in liner algebra | 4. Numerical methods in algebra |
| 5. Numerical calculations | 6. Mathematics1 |
| 7. Mathematics 1 | 8. Iterative Methods for matrix prbbles |

Master Thesis

1. Introducing preconditioned successive over relaxation iterative method via semi-approximate approach for solving Burgers equation

[Maryam Mojarab, Maryam Arab-Ameri, Maryam Alipour kolaei, Omid Zabeti]

نیمسال دوم سال تحصیلی 1402-1403

2. Introducing the variant tensor splittings and their application to solve multi-linear systems

[Maryam Mojarab, Soodeh Zarepour]

نیمسال دوم سال تحصیلی 1401

3. Preconditioning of some Krylov subspace method for solving multi-linear systems

[Maryam Mojarab]

نیمسال دوم سال تحصیلی 01-00

4. Preconditioning of some Krylov subspace method for solving multi-linear systems

[Maryam Mojarab, Seyed Mahdi Amir Jahanshahi, Maryam Arab-Ameri, Maryam Alipour kolaei,]

نیمسال دوم سال تحصیلی 01-00

5. Preconditioning of some Krylov subspace method for solving multi-linear systems

[Maryam Mojarab]

نیمسال اول سال تحصیلی 01-00

6. Preconditioning of some Krylov subspace method for solving multi-linear systems

[Maryam Mojarab]

نیمسال اول سال تحصیلی 01-00

7. Improving the convergence rate of some iterative methods for solving multi-linear systems using preconditioning technique

[Maryam Mojarab]

نیمسال اول سال تحصیلی 01-00

8. A preconditioned SOR method for solving multi-linear systems with an M-tensor

[Maryam Mojarab]

نیمسال دوم سال تحصیلی 00-99

9. Combination preconditioning of saddle point systems

[Maryam Mojarab]

نیمسال دوم سال تحصیلی 99-98

10. The preconditioning technique for the LSQR method for solving the linear systems of equations and least squares problems

[Maryam Mojarab]

نیمسال اول سال تحصیلی 99-98

11. An augmented LSQR method for solving least squares problems

[Maryam Mojarab]

نیمسال اول سال تحصیلی 99-98

12. A polynomial preconditioned LSQR method for solving the linear systems

[Maryam Mojarab]

نیمسال دوم سال تحصیلی 98-97

13. the least squares method for solving linear fredholm integral equations

مونا پاکنهاد, [Maryam Mojarab]

نیمسال دوم سال تحصیلی 96-97

Journals Papers

2024

[1. A new \(I + P\)-like preconditioner for the SOR method for solving multi-linear systems with M -tensors](#)

Afsaneh Hasanpour, Maryam Mojarraab

Journal of Mathematical Modeling Volume: (12) 131 - 144

2023

[2. A new form of LSMR for solving linear systems and least-squares problems](#)

Maryam Mojarraab, Afsaneh Hasanpour, Somayyeh Ghadamyari

International Journal of Computing Science and Mathematics Volume: (18) 266 - 275

2021

[3. A block preconditioner for the GI-LSMR algorithm](#)

Afsaneh Hasanpour, Maryam Mojarraab

Journal of Mathematical Modeling Volume: (9) 347 - 359

2020

[4. Tight-binding method for the electronic and optical properties of C and BN nanotubes](#)

Maryam Mojarraab, Mojtaba Ashhadi

Materials Science and Engineering B-Advanced Functional Solid-State Materials Volume: (261) 1 - 6

[5. A right preconditioner for the LSMR method](#)

Afsaneh Hasanpour, Maryam Mojarraab

Journal of Physics Conference Series Volume: (1592) 012046-1 - 012046-8

2017

[6. Global LSMR\(GI-LSMR\) Method for Solving General Linear Systems with Several Right-Hand Sides](#)

Maryam Mojarraab,

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS Volume: (321) 78 - 89

2015

[7. The block LSMR method a novel efficient algorithm for solving non-symmetric linear systems with multiple right-hand sides](#)

, Maryam Mojarraab

Iranian Journal of Science and Technology Transaction A-Science Volume: (39) 69 - 78

8. The block LSMR algorithm for solving linear systems with multiple right-hand sides

- -, Maryam Mojarab

Iranian Journal of Numerical Analysis and Optimization Volume: (5) 11 - 28

2014

9. LSMR Iterative Method for General Coupled Matrix Equations

, , Maryam Mojarab

JOURNAL OF APPLIED MATHEMATICS Volume: (2014) 1 - 13

Conferences Papers

2023

1. A new preconditioned SOR method based on $(I + P)$ -like preconditioners to solve multi-linear systems for M-tensors

21 iranian conference on fuzzy systems

Afsaneh Hasanpour, Maryam Mojarab

2022

2. A new preconditioning technique for SOR algorithm for solving multi-linear systems

The 11th Seminar on Linear Algebra and its Applications

Afsaneh Hasanpour, Maryam Mojarab

3. A new preconditioner for the SOR method to solve multi-linear systems

The 9th seminar on numerical analysis and its applications

Afsaneh Hasanpour, Maryam Mojarab

2021

4. A Polynomial Preconditioner for the LSQR Method

51-st annual iranian mathematics conference

Somayyeh Ghadamyari, Maryam Mojarab

2020

5. A right preconditioner for the LSMR method

The Third International Conference on Physics, Mathematics and Statistics (ICPMS2020)

Afsaneh Hasanpour, Maryam Mojarab

2018

6. An iterative algorithm based on the least squares method for solving linear Fredholm integral equations

The 7th seminar on numerical analysis and its applications

Maryam Mojarab

7. The Preconditioned Global LSMR (GI-LSMR) Method for the Solution of the Large Matrix Equation $AXB = C$

49th Annual Iranian Mathematics Conference

Maryam Mojarab

8. A MATRIX LSMR ALGORITHM FOR SOLVING CONSTRAINED LINEAR OPERATOR EQUATIONS

49th Annual Iranian Mathematics Conference

Maryam Mojarab

9. Weighted least squares minimal residual method for solving fredholm integral equations of the first kind

2nd conference on dynamical systems and geometric theories

Maryam Mojarab, Mona Paknahad

10. A New Preconditioning Technique of the LSQR Method for Solving the Linear Systems

2nd conference on dynamical systems and geometric theorie

Maryam Mojarab, Razieh Sargazi

Executive activities

مشاوره دانشجویان کارشناسی

from 1402/11/21 - to 1403/04/04

مشاوره دانشجویان کارشناسی

from 1402/07/01 - to 1402/11/05