

# A template for poster presentation at SLAA

First Author<sup>†, 1</sup>, Second Author<sup>†</sup>, Third Author<sup>‡</sup>

<sup>†</sup> Department of Mathematics, Sahand University of Technology, Tabriz, Iran,

<sup>‡</sup> Department of Mathematics, Sahand University of Technology, Tabriz, Iran.

ISC

Sponsored and Indexed by  
CALICA

Abstract

This is a template and short instructions to submit a poster to The 12th Seminar on Linear Algebra and its Applications. Please note to the following limitations in preparation of a poster. The number of manuscript pages is limited to one page, abstract lines: two to seven lines, number of references: up to six. Save your file as SLAA12FirstAuthor.tex and submit a zip file with the name SLAA12FirstAuthor.zip including tex, pdf, figures,... .

Keywords: Linear algebra, Positivity, Symmetry (At least three and at most five keywords)

Mathematics Subject Classification [2010]: 15A03, 15A23, 15B36 (At least one and at most three codes)

$$\forall A, B, C \in S : \operatorname{tr}(ABC) = \operatorname{tr}(ACB).$$

## 1 Introduction

Please note that any paper is limited up to six pages.

## 2 Main results

Please write the main results here.

### 2.1 Formulas

You are able to easily provide various types of the formulas by making use of the following instructions:

1. This is a simple formula  $X - AXF = Q$ , where  $A \in \mathbb{C}^{n \times n}$ ,  $Q \in \mathbb{C}^{n \times p}$ , and  $F \in \mathbb{C}^{p \times p}$ .
2. A typical formula without number:

$$A_{m,n} = \begin{pmatrix} a_{1,1} & a_{1,2} & \cdots & a_{1,n} \\ a_{2,1} & a_{2,2} & \cdots & a_{2,n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m,1} & a_{m,2} & \cdots & a_{m,n} \end{pmatrix}$$

3. Formula in a separate line with number:

$$\mathcal{K}_1(A, r_0) \subseteq \mathcal{K}_2(A, r_0) \subseteq \cdots \subseteq \mathcal{K}_d(A, r_0) = \cdots = \mathcal{K}_n(A, r_0). \quad (1)$$

## 3 Theorem-like environments

You may provide theorems and theorem-like environments such as definition, proposition, lemma with ease.

Definition 3.1. A definition is described here.

We can state the following theorem by virtue of Definition 3.1 and Eq. (1).

Theorem 3.2. A theorem is described here.

Proof. A proof is described here, see [2, 3], [1, Theorem 2] or [1, 3, 4].  $\square$

Lemma 3.3 ([3, Lemma 5.1]). A lemma is described here.

Proposition 3.4. A proposition is described here.

Proposition 3.4 leads to the following corollary.

Corollary 3.5. A corollary is described here.

The proposed algorithm is described in Algorithm 3.6.

Algorithm 3.6. Title of the proposed algorithm.

1. For  $i = 1, \dots, n$  do
2.  $a(i) = i + 1$ .
3. end for

Example 3.7. An example is described here.

Remark 3.8. A remark is described here.

Note 3.9. An important note is described here.

## 4 Numerical results

Numerical results section, if included, appears here.

### 4.1 Table and Figure

Sometimes data needs to be displayed in a table or figure. Here we present some examples of using table and figure environments. See Table ?? and Figure 1.

1845	Jacobi	Jacobi method
1874	Seidel	Gauss-Seidel method
1910	Richardson	Richardson's method
1938-1939	Temple	Method of steepest descent
1940s	Various (analysis by Young and Frankel)	Successive overrelaxation (SOR) method
1952	Hestenes and Stiefel	Conjugate gradient method

Table 1: Dates of publication of selected iterative methods.

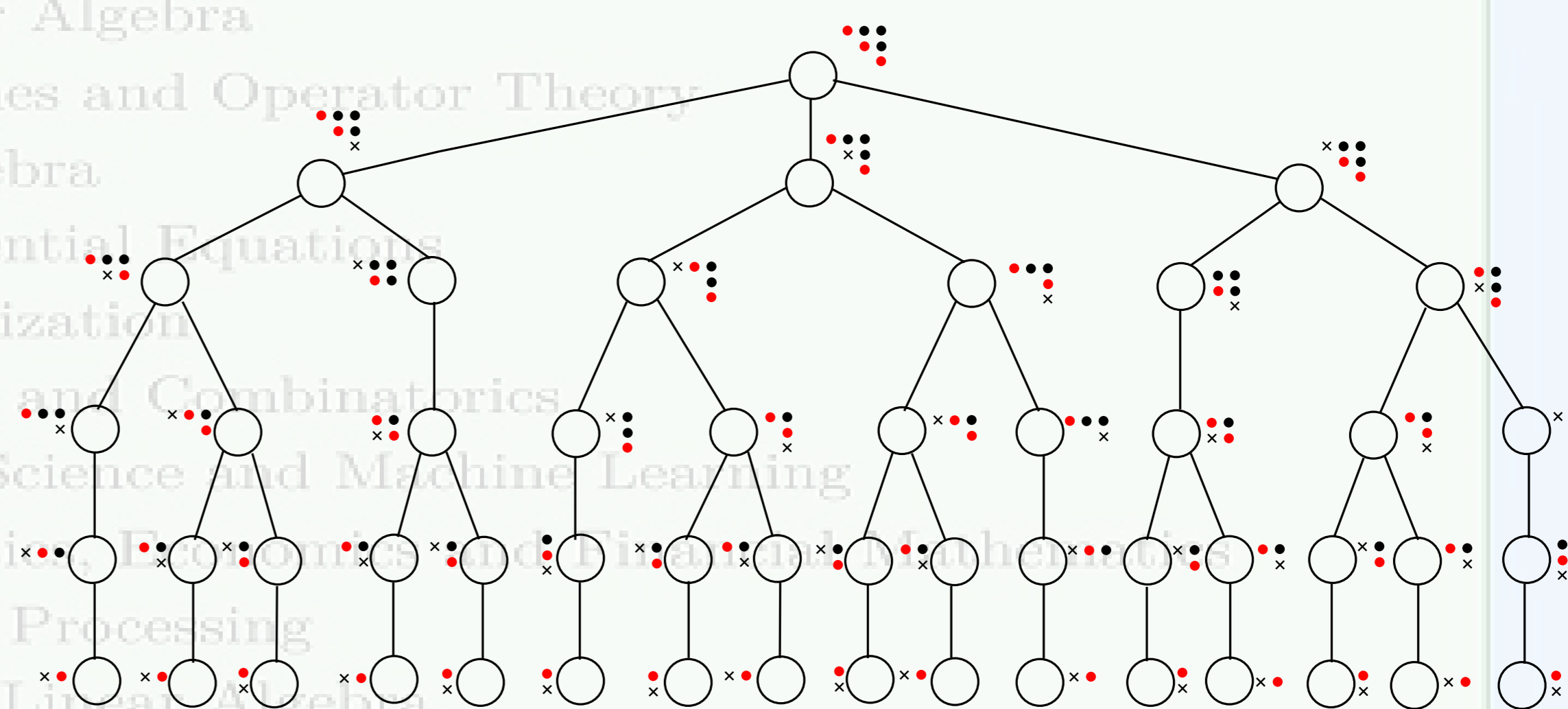


Figure 1: A sample figure caption

## 5 Conclusion

A one paragraph conclusion (at most four lines) is nessesary.

This is a template and short instructions to submit a manuscript to The 12th Seminar on Linear Algebra and its Applications. Please note to the following limitations in preparation of a manuscript. The number of manuscript pages is limited to six pages, abstract lines: two to seven lines, number of references: up to six. Save your file as SLAA12FirstAuthor.tex and submit a zip file with the name SLAA12FirstAuthor.zip including tex, pdf, figures,... .

## References

- [1] R. Bhatia, Matrix Analysis, Springer-Verlage, New York, 1997.
- [2] A.A. Jafarian, H. Radjavi, P. Rosenthal and A.R. Sourour, Simultaneous triangularizability, near commutativity and Rota's theorem, Trans. Amer. Math. Soc., 347 (1995), No. 6, 2191–2199.
- [3] J. Li, L. Wu, H. Dani and H. Liu, Unsupervised Personalized Feature Selection, In Proceedings of the 32nd AAAI Conference on Artificial Intelligence, 2018.
- [4] M. Radjabipour, K. Seddighi and Y. Taghavi, Additive mappings on operator algebras preserving absolute values, Linear Algebra Appl., 327 (2001), 197–206.

$$A = U\Sigma V^T = \left[ \begin{array}{ccc|ccc} \mathbf{u}_1 & \mathbf{u}_2 & \cdots & \mathbf{u}_r & \mathbf{u}_{r+1} & \cdots & \mathbf{u}_m \\ \hline & & & & & & \end{array} \right] \left[ \begin{array}{cccccc} \sigma_1 & 0 & \cdots & 0 & 0 & \cdots & 0 \\ 0 & \sigma_2 & \cdots & 0 & 0 & \cdots & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \cdots & \sigma_r & 0 & \cdots & 0 \\ 0 & 0 & \cdots & 0 & 0 & \cdots & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \cdots & 0 & 0 & \cdots & 0 \end{array} \right] \left[ \begin{array}{c} \mathbf{v}_1^T \\ \mathbf{v}_2^T \\ \vdots \\ \mathbf{v}_r^T \\ \mathbf{v}_{r+1}^T \\ \vdots \\ \mathbf{v}_n^T \end{array} \right] \left. \begin{array}{l} \text{Row } A \\ \\ \\ \text{Nul } A \end{array} \right\}$$

sponsors - حامیان علمی سمینار



Contact - اطلاعات تماس

Email: SLAA@sut.ac.ir	Web: <a href="https://slaa.sut.ac.ir/">https://slaa.sut.ac.ir/</a>
Fax: 041-33444300	Postal code: 5331817634
Tel: 041-33459072	Postal box: 513351996



آدرس دبیرخانه : تبریز - شهر جدید سهند - دانشگاه صنعتی سهند - دانشکده علوم پایه.

Sahand University of Technology-Sahand New Town- Tabriz-Iran.