

# Yuri Ruben Hakopian

**Faculty of Informatics and Applied Mathematics**  
Chair of Numerical Analysis and Mathematical Modeling  
Professor

☎ 23-99  
(060) 71-03-99  
✉ yuri.hakopian@ysu.am

## Education

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Applied Mathematics
<b>Date</b>	1966 - 1972
<b>Degree name</b>	Qualified specialist

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## Scientific Rank/degree

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<b>Institution</b>	Yerevan State University
<b>Date</b>	2006
<b>Degree name</b>	Professor
<b>Specialty</b>	Physico-mathematical sciences

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<b>Institution</b>	Institute for Informatics and Automation Problems, National Academy of Sciences of Armenia
<b>Date</b>	2000
<b>Degree name</b>	Doctor
<b>Specialty</b>	Physico-mathematical sciences
<b>Research Topic</b>	Algebraic Multigrid Preconditioners for Finite Element Matrices

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## Language skills

Հայերեն Русский English

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## Work experience

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<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2021 till now
<b>Rank/degree</b>	Dean of the Faculty of Informatics and Applied Mathematics

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<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2020 - 2021
<b>Rank/degree</b>	Acting Dean of the Faculty of Informatics and Applied Mathematics

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**Institution** Yerevan State University  
**Period of time** 2007 - 2020  
**Rank/degree** Head of the Department of Numerical Analysis and Mathematical Modeling

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**Institution** Yerevan State University  
**Period of time** 2001 - 2007  
**Rank/degree** Head of the Department of Mathematical Methods and Modeling

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**Institution** Yerevan State University  
**Period of time** 1996 - 2001  
**Rank/degree** Associate Professor, Department of Mathematical Methods and Modeling

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**Institution** Yerevan State University  
**Period of time** 1987 - 1996  
**Rank/degree** Associate Professor, Department of Mathematical Models and Methods of Natural Sciences

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**Institution** Yerevan State University  
**Period of time** 1980 - 1987  
**Rank/degree** Associate Professor, Department of Numerical Analysis

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**Institution** Yerevan State University  
**Period of time** 1976 - 1980  
**Rank/degree** Assistant at the Department of Numerical Analysis

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## Scientific interests

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- Numerical Analysis
  - Numerical Linear Algebra
  - Algebraic Multilevel Preconditioning Methods
  - Finite Element Method
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## Participation in international conferences and seminars

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**30/09/1997 - 02/11/1997** Research visit: INTAS, grant No. 93-377ex  
Catholic University of Nijmegen  
Netherlands (the)

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**28/09/1996 - 09/11/1996** Research visit: INTAS, grant No. 93-377ex  
Catholic University of Nijmegen  
Netherlands (the)

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- 12/09/1995 -** Research visit: INTAS, grant No. 93-377  
**12/10/1995** Catholic University of Nijmegen  
Netherlands (the)
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- 07/09/1993 -** Research visit: NWO, grant No. 7.13.-016  
**30/10/1993** Catholic University of Nijmegen  
Netherlands (the)
- 
- 20/03/1998 -** Research visit: Department of Mathematics of the University of Houston  
**01/05/1998** University of Houston, Texas  
United States of America (the)
- 
- 28/11/1992 -** Research visit: Department of Mathematics of the University of Jyuvaskula  
**12/12/1992** University of Jyuvaskula  
Finland
- 
- 07/04/1991 -** Research visit: Semester on Numerical Analysis and Mathematical Modelling  
**10/04/1991** Stephan Banach International Mathematical Center, Warsaw  
Poland
- 
- 07/04/1987 -** Research visit: Semester on Numerical Analysis and Mathematical Modelling  
**21/04/1987** Stephan Banach International Mathematical Center, Warsaw  
Poland
- 
- 24/06/1997 -** International Algebraic Conference dedicated to the memory of D.K.Faddeev  
**30/06/1997** V.A. Steklov Mathematical Institute of the Russian Academy of Sciences, St.  
Petersburg branch  
Russian Federation (the)
- 
- 18/09/1995 -** 1th European Conference on Numerical Mathematics and Advanced Applications  
**22/09/1995** ENUMATH'95  
Pierre and Marie Curie University, Paris  
France
- 
- 29/06/1992 -** 3th International Conference on Numerical Analysis  
**03/07/1992** The Russian Academy of Sciences, Moscow  
Russian Federation (the)
- 
- 21/05/1990 -** 4th International Symposium on Domain Decomposition Methods  
**25/05/1990** Academy of Sciences of the USSR, Moscow  
Russian Federation (the)
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- 13/08/1989 -** 4th International Conference on Differential Equations and Applications  
**19/08/1989** Bulgarian Academy of Sciences, Ruse  
Bulgaria
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<b>21/09/2008 - 26/09/2008</b>	VI international conference «Problems of the dynamics of interaction of deformable media» Institute of Mechanics of the National Academy of Sciences of the Republic of Armenia Armenia
<b>19/09/2011 - 23/09/2011</b>	VII international conference «Problems of the dynamics of interaction of deformable media» Institute of Mechanics of the National Academy of Sciences of the Republic of Armenia Armenia
<b>25/09/1997 - 29/09/1997</b>	International Conference CSIT'1997 «Computer Science and Information Technologies» The National Academy of Sciences of the Republic of Armenia Armenia
<b>17/08/1999 - 22/08/1999</b>	International Conference CSIT'1999 «Computer Science and Information Technologies» The National Academy of Sciences of the Republic of Armenia Armenia
<b>17/09/2001 - 20/09/2001</b>	International Conference CSIT'2001 «Computer Science and Information Technologies» The National Academy of Sciences of the Republic of Armenia, Yerevan Armenia
<b>22/09/2003 - 26/09/2003</b>	International Conference CSIT'2003 «Computer Science and Information Technologies» The National Academy of Sciences of the Republic of Armenia Armenia
<b>26/09/2011 - 30/09/2011</b>	International Conference CSIT'2011 «Computer Science and Information Technologies» The National Academy of Sciences of the Republic of Armenia Armenia

## Membership

<b>Institution</b>	Member of Specialized Council 044 «Mathematical Cybernetics and Mathematical Logic» at the Yerevan State University
<b>Period of time</b>	2008 - 2018
<b>Institution</b>	Member of Specialized Council 032 «Control, Automation Systems and Electronics» at the State Engineering University of Armenia
<b>Period of time</b>	2006 - 2007

## State awards and honorary titles

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2009 Gold Medal of Yerevan State University

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## Publications

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*Article*

### **On the Analytical Moore-Penrose Inversion of Complex Bidiagonal Matrices**

Yu.R.Hakopian, A.H.Manukyan

Lobachevskii Journal of Mathematics 2025 3994 - 4008

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*Article*

### **THE MOORE-PENROSE INVERSE OF TRIDIAGONAL SKEW-SYMMETRIC MATRICES. I**

Yu.R.Hakopian, A.H.Manukyan, H.V.Mikaelyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2023 1-8

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*Article*

### **The Moore-Penrose inverse of tridiagonal skew-symmetric matrices. II**

Yu.R. Hakopian, A.H. Manukyan, H.V. Mikaelyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2023 31-43

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*Manual*

### **Введение в метод конечных элементов**

Ю.Р.Акопян

2022 142

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*Article*

### **Analytical Inversion of Tridiagonal Hermitian Matrices**

Yuri R. Hakopian, Avetik H. Manukyan

Mathematical Problems of Computer Science 2022 7-19

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*Manual*

### **Մատրիցային անալիզի տարրեր**

Յուրի Ռուբենի Հակոբյան

2022 224

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*Article*

### **Computing the Moor-Penrose Inverse for Bidiagonal Matrices**

Yuri Hakopian

Могилянський математичний журнал (Mohyla Mathematical Journal) 2019 11-23

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*Book*

### **Թվային մեթոդներ**

Յուրի Հակոբյան

2019 462

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*Book*

### **Թվային մեթոդներ**

Յուր.Հակոբյան

*Article*

**Moore-Penrose inverse of bidiagonal matrices.IV**

Yu.R. Hakopian, S.S.Aleksanyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2016 23-29

<http://www.y-su.am/science/en/journals>

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*Article*

**Moore-Penrose inverse of bidiagonal matrices.III**

Yu.R.Hakopian, S.S.Aleksanyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2016 12-21

<http://www.y-su.am/science/en/journals>

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*Article*

**Moore-Penrose inverse of bidiagonal matrices.IV**

Yu.R.Hakopian, S.S.Aleksanyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2016 23-29

<http://www.y-su.am/science/en/journals>

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*Article*

**THE MOORE-PENROSE INVERSE OF BIDIAGONAL MATRICES. I**

Yu.R. Hakopian, S.S.Aleksanyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2015 11-20

<http://www.y-su.am/science/en/journals>

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*Article*

**Moore-Penrose inverse of bidiagonal matrices.II**

Yu.R.Hakopian, S.S.Aleksanyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2015 8-16

<http://www.y-su.am/science/en/journals>

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