



## غلامرضا حجتی

استاد

دانشکده: ریاضی، آمار و علوم کامپیوتر



### سوابق تحصیلی

مقطع تحصیلی	سال اخذ مدرک	رشته و گرایش تحصیلی	دانشگاه
کارشناسی	۱۳۷۴	ریاضی محض	دانشگاه تبریز
کارشناسی ارشد	۱۳۷۶	ریاضی کاربردی	تربیت مدرس
دکترای تخصصی	۱۳۸۳	ریاضی کاربردی	دانشگاه تبریز

### اطلاعات استخدامی

محل خدمت	عنوان سمت	نوع استخدام	نوع همکاری	پایه
دانشکده ریاضی، آمار و علوم کامپیوتر	هیات علمی	رسمی قطعی	تمام وقت	

### سوابق اجرایی

- معاون آموزشی و تحصیلات تکمیلی دانشگاه تبریز
- رییس دانشگاه مراغه
- رییس دانشکده ریاضی، آمار و علوم کامپیوتر (4 سال)
- معاون آموزشی دانشکده ریاضی، آمار و علوم کامپیوتر
- مدیر امور دانشجویی دانشگاه تبریز
- دبیر هیات اجرایی جذب دانشگاه تبریز

### جوایز و تقدیر نامه ها

- کسب عنوان سرآمد آموزشی دانشگاه تبریز
- کسب عنوان پژوهشگر برتر دانشکده ریاضی، آمار و علوم کامپیوتر
- کسب عنوان پژوهشگر برتر استان آذربایجانشرقی در حوزه علوم پایه

## موضوعات تدریس تخصصی

- آنالیز عددی
- حل عددی معادلات دیفرانسیل

## فعالیت های علمی و اجرایی

- عضو هیات ممیزه دانشگاه تبریز (4 دوره)
- عضو هیات ممیزه دانشگاه محقق اردبیلی
- عضو هیات ممیزه دانشگاه صنعتی سهند تبریز
- عضو هیات ممیزه دانشگاه صنعتی ارومیه
- رییس کارگروه تخصصی نظارت و ارزیابی عملکرد دانشگاههای دولتی استان آذربایجانشرقی
- عضو هیات تحریریه در 4 نشریه تخصصی
- دبیر اجرایی چهل و سومین کنفرانس ریاضی ایران 1391

## همایش ها و کنفرانس ها

- دبیر اجرایی چهل و سومین کنفرانس ریاضی ایران، دانشگاه تبریز
- عضو کمیته علمی ششمین سمینار آنالیز عددی و کاربردهای آن، دانشگاه مراغه
- عضو کمیته علمی هشتمین سمینار آنالیز عددی و کاربردهای آن، دانشگاه کردستان
- عضو کمیته علمی نهمین سمینار آنالیز عددی و کاربردهای آن، دانشگاه گیلان
- دبیر دهمین سمینار آنالیز عددی و کاربردهای آن، دانشگاه تبریز
- عضو کمیته علمی چهاردهمین سمینار معادلات دیفرانسیل، سیستم‌های دینامیکی و کاربردها، دانشگاه تحصیلات تکمیلی زنجان

## عضویت در هیات تحریریه مجلات علمی و پژوهشی

عضو هیات تحریریه در نشریات:

Journal of Numerical Analysis and Optimization

Computational Methods for Differential Equations

Journal of Mathematical Modeling

Journal of Advanced Mathematical Modeling

## عضویت در انجمن های علمی

عضو انجمن ریاضی ایران

عضو کمیسیون تخصصی آنالیز عددی - انجمن ریاضی ایران

1. A. Moradi , A. Abdi , G. Hojjati,Strong stability preserving second derivative general linear methods based on Taylor series conditions for discontinuous Galerkin discretizations,Journal of Scientific Computing,2024
2. M. Sharifi , A. Abdi , G. Hojjati,On the construction of diagonally implicit two–step peer methods with RK stability,Applied Numerical Mathematics,2024
3. M. Eghbaljoo , Hojjati , A. Abdi,Adaptive second derivative multistep methods for solving stiff chemical problems,Journal of Mathematical Chemistry,2024
4. On the implementation of explicit two-step peer methods with Runge-Kutta stability,Applied Numerical Mathematics,2023
5. M. Sharifi , A. Abdi , M. Brañ , G. Hojjati,High order second derivative diagonally implicit multistage integration methods for ODEs,Mathematical Modelling and Analysis,2023
6. Strong stability preserving integrating factor general linear methods,Computational and Applied Mathematics,2023
7. R. Akbari , G. Hojjati , A. Abdi,Algebraic stability and irreducibility of second derivative methods,Applied Numerical Mathematics,2023
8. A. Moradi , A. Abdi , G. Hojjati,RK-stable second derivative multistage methods with strong stability preserving based on Taylor series conditions,Computational and Applied Mathematics,2023
9. T. Majidi , A. Abdi , G. Hojjati,Generalized second derivative linear multistep methods for ordinary differential equations,Numerical Algorithms,2022
10. A. Moradi , A. Abdi , G. Hojjati,HIGH ORDER EXPLICIT SECOND DERIVATIVE METHODS WITH STRONG STABILITY PROPERTIES BASED ON TAYLOR SERIES CONDITIONS,ANZIAM journal,Vol. 64,pp. 264-291,2022
11. A. Abdi , G. Hojjati , G. Izzo , Z. Jackiewicz,Global error estimation for explicit general linear methods,Numerical Algorithms,2022
12. A. Abdi , G. Hojjati , G. Izzo , Z. Jackiewicz,Global error estimation for explicit second derivative general linear methods,Numerical Algorithms,2022
13. A. Abdi , G. Hojjati , L. Taheri Koltape,Extended SDBDF-Type Methods Based on Linear Barycentric Rational Interpolants for ODEs,Bulletin of the Iranian Mathematical Society,2022
14. A. Moradi , A. Abdi , G. Hojjati,Implicit-explicit second derivative general linear methods with strong stability preserving explicit part,Applied Numerical Mathematics,2022
15. S. Fazeli ,& G. Hojjati,A class of two-step collocation methods for Volterra integro-differential equations,Applied Numerical Mathematics,2022
16. P. RAMAZANI , A. ABDI , G. HOJJATI , A. MORADI,EXPLICIT NORDSIECK SECOND DERIVATIVE GENERAL LINEAR METHODS FOR ODES,ANZIAM Journal,2022
17. B. Talebi , A. Abdi , G. Hojjati,Composite symmetric second derivative general linear methods for Hamiltonian systems,Calcolo,2022
18. A. Moradi , A. Abdi , G. Hojjati,Strong stability preserving implicit and implicit–explicit second derivative general linear methods with RK stability,Computational and Applied Mathematics,2022
19. G. Hojjat ,& L. Taheri Koltape,On the stability functions of second derivative implicit advanced-step point methods,Journal of Mathematical Modeling,2022
20. A. Abdi ,& G. Hojjati,Second derivative backward differentiation formulae for ODEs based on barycentric rational interpolants,Numerical Algorithms,2021
21. Z. Esmaeelzadeh , A. Abdi , G. Hojjati,EBDF-type methods based on the linear barycentric rational interpolants for stiff IVPs,Journal of Applied Mathematics and Computing,2021
22. A. Jalilian , A. Abdi , G. Hojjati,Variable stepsize SDMSMs for ordinary differential equations,Applied Numerical Mathematics,2021
23. A.Y.J. Almasoodi , A. Abdi , G. Hojjati,A GLMs-based difference-quadrature scheme for Volterra integro-differential equations,Applied Numerical Mathematics,2021

- A. Abdi , G. Hojjati , M. Sharifi,Implicit–explicit second derivative diagonally implicit .24  
 .multistage integration methods,Computational and Applied Mathematics,2020
- S. Fazeli ,& G. Hojjati,Second derivative two-step collocation methods for ordinary differential .25  
 .equations,Applied Numerical Mathematics,2020
- A. Abdi ,& G. Hojjati,Projection of Second Derivative Methods for Ordinary Differential .26  
 .Equations with Invariants,Bulletin of the Iranian Mathematical Society,2020
- A. Abdi , G. Hojjati , Z. Jackiewicz , H. Mahdi,A new code for Volterra integral equations .27  
 .based on natural Runge-Kutta methods,Applied Numerical Mathematics,2019
- H. Mahdi , Hojjati , A. Abdi,On the numerical stability of the general linear methods for .28  
 .Volterra integro-differential equations,Applied Numerical Mathematics,2019
- H. Mahdi , G. Hojjati , A. Abdi,Explicit General Linear Methods with a Large Stability Region .29  
 .for Volterra Integro-differential Equations,Mathematical Modelling and Analysis,2019
- H. Mahdi , A. Abdi , G. Hojjati,Efficient general linear methods for a class of Volterra integro- .30  
 .differential equations,Applied Numerical Mathematics,2018
- N. Yousefzadeh , G. Hojjati , A. Abdi1,Construction of Implicit–Explicit Second-Derivative BDF .31  
 .Methods,Bulletin of the Iranian Mathematical Society,2018
- M. Hosseini Nasab , A. Abdi , G. Hojjati,Symmetric second derivative integration .32  
 .methods,Journal of Computational and Applied Mathematics,2018
- N. Barghi Oskouie , A. Abdi , G. Hojjati,Efficient second derivative methods with extended .33  
 .stability regions for non-stiff IVPs,Computational and Applied Mathematics,2018
- N. Barghi Oskouie ,& A. AbdiG. Hojjati,Some efficient Nordsieck integration methods for .34  
 .IVPs,Iranian Journal of Numerical Analysis and Optimization,2018
- A. Movahedinejad , G. Hojjati , A. Abdi,Construction of Nordsieck Second Derivative General .35  
 .Linear Methods with Inherent Quadratic Stability,Mathematical Modelling and Analysis,2017
- M. Hosseini Nasab , G. Hojjati , A. Abdi,A Class of Methods with Optimal Stability Properties .36  
 for the Numerical Solution of IVPs: Construction and Implementation,International Journal of  
 .Computational Methods,2017
- M. Hosseini Nasab , G. Hojjati , A. Abdi,G-symplectic second derivative general linear .37  
 .methods for Hamiltonian problems,Journal of Computational and Applied Mathematics,2017
- A. Movahedinejad , G. Hojjati , A. Abdi,Second derivative general linear methods with inherent .38  
 .Runge–Kutta stability,Numerical Algorithms,2016
- A. Abdi , S. Fazeli , G. Hojjati,Construction of efficient general linear methods for stiff .39  
 .Volterra integral equations,Journal of Computational and Applied Mathematics,2016
- A. Movahedinejad , A. Abdi , G. Hojjati,A hybrid method with optimal stability properties for .40  
 the numerical solution of stiff differential systems,Computational Methods for Differential  
 .Equations,2016
- G. Hojjati,A class of parallel methods with superfuture points technique for the numerical .41  
 .solution of stiff systems,Journal of Modern Methods in Numerical Mathematics,2015
- S. Fazeli , G. Hojjati , S. Shahmorad,Multistep collocation and iterated multistep collocation .42  
 methods for solving two-dimensional Volterra integral equations,Journal of Modern Methods in  
 .Numerical Mathematics,2015
- S. Fazeli ,& G. Hojjati,Numerical solution of Volterra integro-differential equations by .43  
 .superimplicit multistep collocation methods,Numerical Algorithms,2015
- A. K. Ezzeddine , G. Hojjati , A. Abdi,Perturbed second derivative multistep methods,Journal .44  
 .of Numerical Mathematics,2015
- A. Abdi ,& G. Hojjati,Implementation of Nordsieck second derivative methods for stiff .45  
 .ODEs,Applied Numerical Mathematics,2015
- A. Abdi ,& G. Hojjati,High order second derivative methods with Runge-Kutta stability for the .46  
 .numerical solution of stiff ODEs,Iranian Journal of Numerical Analysis and Optimization,2015
- A. Abdi , M. Bras´ , G. Hojjati,On the construction of second derivative diagonally implicit .47

- .multistage integration methods for ODEs,Applied Numerical Mathematics,2014
- A. K. Ezzeddine , G. Hojjati , A. Abdi,Sequential second derivative general linear methods for .48  
.stiff systems,Bulletin of the Iranian Mathematical Society,2014
- G. Hojjati , A. Abdi , F. Mirzaee , S. Bimesl,Numerical solution of stiff systems of differential .49  
equations arising from chemical reactions,Iranian Journal of Numerical Analysis and  
.Optimization,2014
- S. Ashrafi , M. Alineia , H. Kheiri , G. Hojjati,Spectral Collocation Method for the Numerical .50  
.Solution of the Gardner and Huxley Equations,International Journal of Nonlinear Science,2014
- S. Fazeli , G. Hojjati , H. Kheiri,A Piecewise Approximation for Linear Two Dimensional .51  
Volterra Integral Equation by Chebyshev Polynomials,International Journal of Nonlinear  
.Science,2013
- B. Shiri , S. Shahmorad , G. Hojjati,CONVERGENCE ANALYSIS OF PIECEWISE CONTINUOUS .52  
COLLOCATION METHODS FOR HIGHER INDEX INTEGRAL ALGEBRAIC EQUATIONS OF THE  
.HESSENBERG TYPE,International Journal of Applied Mathematics and Computer Science,2013
- G. Hojjati , H. Kheiri , S. Irandoust,Solving painleve equation of type 1 using homotopy Padé .53  
method,Advanced Studies in Contemporary Mathematics,2013
- S. Fazeli , G. Hojjati , S. Shahmorad,Super implicit multistep collocation methods for .54  
.nonlinear Volterra integral equations,Mathematical and Computer Modelling,2012
- S. Fazeli , G. Hojjati , S. Shahmorad,Multistep Hermite collocation methods for solving .55  
Volterra Integral Equations,Numerical Algorithms,2012
- A. K. Ezzeddine ,& G. Hojjati,Hybrid extended backward differentiation formulas for stiff .56  
systems,International Journal of Nonlinear Science,2012
- A. Shokri , M. Rahimi , S. Shahmorad , G. Hojjati,A new two-step hybrid Obrechhoff method .57  
for the numerical integration of second-order IVPs,Journal of Computational and Applied  
.Mathematics,2011
- .A. Abdi ,& G. Hojjati,An extension of general linear methods,Numerical Algorithms,2011 .58
- M. Falati ,& G. Hojjati,Integration of chemical stiff ODEs using exponential propagation .59  
method,Journal of Mathematical Chemistry,2011
- A. K. Ezzeddine ,& G. Hojjati,Third derivative multistep methods for stiff systems,International .60  
Journal of Nonlinear Science,2011
- A. Abdi ,& G. Hojjati,Maximal order for second derivative general linear methods with Runge- .61  
Kutta stability,Applied Numerical Mathematics,2011
- A. K. Ezzeddine ,& G. Hojjati,Hybrid extended backward differentiation formulas for stiff .62  
systems,International Journal of Nonlinear Science,2011
- S. Fazeli , H. Kheiri , G. Hojjati,Homotopy analysis and homotopy Pade methods for mixed .63  
Volterra-Fredholm integral equations,Advanced Studies in Contemporary Mathematics,2010
- M. Mehdizadeh Khalsarayi , M. Rahimi , G. Hojjati,The new class of super-implicit second .64  
derivative multistep methods for stiff systems,Journal of Applied Functional Analysis,2009
- G. Hojjati , M. Rahimi , S. M. Hosseni,New second derivative multistep methods for stiff .65  
systems,Applied Mathematical Modelling,2006
- J.C. Butcher, G. Hojjati,Second derivative methods with RK stability,Numerical .66  
Algorithms,2005
- G. Hojjati , M. Rahimi , S. M. Hosseni,A-EBDF: An adaptive method for numerical solution of .67  
stiff systems of ODEs,Mathematics and Computers in Simulation,2004
- S. M. Hosseini ,& G. Hojjati,Matrix free MEBDF method for the solution of stiff systems of .68  
ODEs,Mathematical and Computer Modelling,1999

۲. حل عددی معادلات دیفرانسیل معمولی  
۳. روش‌های عددی برای معادلات دیفرانسیل معمولی