

Curriculum Vitae

PERSONAL INFORMATION:

Name: **Parviz Ahmadi**

Associate Professor in **University of Zanjan** (from 2009 to now).

Date of Birth: 1976

Place of Birth: Zanjan, Iran

Marital Status: Married

E-mail: pahmadi2003@yahoo.com and p.ahmadi@znu.ac.ir

EDUCATIONAL RECORDS:

<i>Degree</i>	<i>Institution</i>	<i>Field</i>	<i>Date</i>
B.Sc.	University of Zanjan	Mathematics	1997 – 2001
M.Sc.	Tehran University	Pure Mathematics (ODE)	2001 – 2003
Ph.D.	Tarbiat Modares University	Differential Geometry	2003 – 2008

Doctoral thesis title: Cohomogeneity one simply connected Lorentzian space forms.

Adviser's name: Dr. S.M.B. Kashani

M.Sc. dissertation title: Geometric Singular Perturbation Theory and Normal forms.

Supervisor's name: Dr. Y. Farjami

RESEARCH INTERESTS:

(I) *Pseudo – Riemannian Geometry.*

(II) *G– manifolds.*

PUBLICATIONS:

1. {With S.M.B.Kashani}, *Cohomogeneity one anti de Sitter space $\mathbb{H}_1^3$* , Bull. Iranian Math. Soc. 35, No. 1, (2009), 221–233.
2. {With S.M.B.Kashani and H.Abedi}, *Cohomogeneity one de Sitter space $\mathbb{S}_1^n$* , Acta Math. Sin. (Engl. Ser.) 26, No.10, (2010), 1915–1926.
3. *On groups acting by cohomogeneity one on the Euclidean space $\mathbb{R}^n$* , J. Contemp. Math. Anal. Vol. 45, No. 3, (2010), 174-177.
4. {With S.M.B. Kashani }, *Cohomogeneity one Minkowski space $\mathbb{R}_1^n$* , Publ. Math. Debrecen 78, No. 1, (2011), 49–59.
5. *cohomogeneity one three dimensional anti de sitter space, proper and nonproper actions*, Differential Geometry and its Applications Vol. 39 (2015), 93-112.
6. *Singular orbits in Cohomogeneity one Pseudo Euclidean space*, Bull. Malays. Math. Sci. Soc., 38(1), (2015), 73-90.
7. {with H. Khatibzadeh} *On the Convergence of Inexact Proximal Point Algorithm on Hadamard Manifolds*, Taiwanese Journal of Mathematics, Vol. 18, No. 2, (2014), 419-433.
8. {with H. Khatibzadeh} *Convergence and Rate of Convergence of a Non-autonomous Gradient System on Hadamard Manifolds*, Lobachevski Journal of Mathematics, Vol. 35(3), (2014), 165-171.
9. {with H. Khatibzadeh} *On the Convergence of Solutions to a Difference Inclusion on Hadamard Manifolds*, Bulletin of the Iranian Mathematical Society, Vol. 41, No. 4, (2015), 1045-1059.
10. {with H. Khatibzadeh} *Long time behavior of quasi-convex and pseudo-convex gradient systems on Riemannian manifolds*, Filomat Vol 31, No 14 (2017) 4571–4578 .
11. *Cohomogeneity one dynamics on three dimensional Minkowski space*, Journal of Mathematical Physics Analysis Geometry Issue 15 (2019-06-10) PP. 155-169.
12. {with H. Khatibzadeh} *Semi-group generated by evolution equations associated with monotone vector fields*, PUBLICATIONES MATHEMATICAE-DEBRECEN, Issue 93 (2018-10-27) PP. 1-17.
13. {with Salim safari mazjin} *On cohomogeneity one linear actions on pseudo-Euclidean space $\mathbb{R}^{p,q}$* , DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS Issue 68 (2020-02-01) PP. 1-17
14. {with Masoud Hassani} *Cohomogeneity one actions on the three-dimensional Einstein universe*, GEOMETRIAE DEDICATA Issue 206 (2020-04-27) PP. 105-150

15. {with Salim safari mazjin} **A Classification of Cohomogeneity One Actions on the Minkowski Space $R^{3,1}$** , Bulletin of the Iranian Mathematical Society Issue 47 (2020-11-09) PP. 1905-1924
16. {with Masoud Hassani} **Cohomogeneity one conformal actions on the 3-sphere and the three-dimensional Euclidean space**, PUBLICATIONES MATHEMATICAE-DEBRECEN Issue 99 (2021-07-28) PP. 51-68
17. {with Hadi Khatibzadeh and Saeid Mohebbi} **On the Generation of Nonlinear Semigroups of Contractions and Evolution Equations on Hadamard Manifolds**, Mediterranean Journal of Mathematics Issue 18 (2021-09-07) PP. 1-23.
18. {with Zeinab Tadrissi, Masoud Hassani and Salim safari mazjin} **Conformal actions on the Einstein universe**, JOURNAL OF GEOMETRY AND PHYSICS Issue 181 (2022-08-28) PP. 1-10
19. {with Salim safari mazjin} **Actions on the Four-Dimensional Pseudo-Euclidean Space $\mathbb{R}^{2,2}$ with a Three-Dimensional Orbit**, Journal of Mathematical Physics Analysis Geometry Issue 18 (2023-01-10) PP. 303-331
20. {with Masoud Hassani} **Isometric actions on the four dimensional Minkowski spacetime**, DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS Issue 88 (2023-06-15) PP. 1-22
21. {with Fatemeh Ahmadi and Hadi Khatibzadeh} **Product of Resolvents on Hadamard Manifolds**, Mediterranean Journal of Mathematics Issue 21 (2024-03-23) PP. 1-15
22. {with Halime Mahdiloo and Masoud Hassani} **Actions with cohomogeneity zero or one on the de Sitter space $dS^{n-1,1}$** , DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS Issue 97 (2024-12-15) PP. 1-16
23. {with Milad Ahmadifard} **CONFORMAL ACTIONS ON THE SPHERE WITH AN OPEN ORBIT**, ANNALS OF GLOBAL ANALYSIS AND GEOMETRY Issue 69 (2026-04-09) PP. 1-19.
24. {with Hadi Khatibzadeh and Saeid Mohebbi} **The Trotter–Kato Theorem on Hadamard Manifolds**, Mediterranean Journal of Mathematics Issue 104 (2026-04-20) PP. 1-16 .
25. {with Samaneh Motaghian and Masoud Hassani} **Actions on the Two-Dimensional Einstein Universe**, Bulletin of the Iranian Mathematical Society Issue 52 (2026-08-26) PP. 1-40.

26. پرویز احمدی، مسعود حسینی، رضا میرزایی، مروری بر عمل های با نقص همگنی یک، فرهنگ و اندیشه یاضی شماره 64 (24/09/1398) صفحات 79-98

27. سجاد رنجیر، هادی خطیب زاده، پرویز احمدی، تحلیلی بر فضاهای متریک و ژئودزیک، پژوهش های ریاضی (علوم سابق) خوارزمی شماره 7 (01/04/1400) صفحات 67-82

Research Projects:

Project title: *The study of Simply connected Lorentzian space forms of cohomogeneity one.*

Start Date: September 2006, **End Date:** September 2008.

Kind of Project: *Theoretical.*

Responsibility: *Colleague.*

Commander: *Presidential office*

MEMBERSHIP OF SCIENTIFIC SOCIETIES:

Iranian Math. Soc.

CONFERENCES AND WORKSHOPS ATTENDED:

1. CIMPA UNESCO SCHOOL ON ***Riemannian, Pseudo-Riemannian Geometry and Dynamics and Applications***, El-Oued, Algeria, Feb.26th – Mar. 10th , 2005.
2. Visiting ***Ecole Normale Supérieure de Lyon, France***, for six months (from Feb 2005 to Jul 2006) as a researcher visitor.
3. Attending in the course: ***Mathematics Education Improvement for Middle East***, implemented in OSAKA, JAPAN, Sep. 29th -- Nov. 10th , 2008.
4. Attending in ***Advanced School and Workshop on Discrete Groups in Complex Geometrie, ICTP, ITALY***, 28 June - 16 July 2010.
5. Attending in ***Advanced School and Workshop on Geometry of Discrete actions, ICTP, ITALY***, 24 August - 4 September 2015.

TALKS:

1. Talking about "***Cohomogeneity one Lorentzian spaces H_1^3 and S_1^n*** ", 40th Annual Iranian Mathematics Conference 17-20 August 2009, Sharif University of Technology, Tehran, Iran.

2. Talking: "*Cohomogeneity one Lorentzian space – forms*" , (14 April 2009), Mathematics Department - IASBS, Zanjan, Iran.
3. Talking about "*Euclidean and Non-Euclidean Geometries*", (28 April 2010), Department of Mathematics, Zanjan University, Zanjan, Iran.
4. Talking about "*On proper actions on anti de Sitter space*", 41nd Annual Iranian Mathematics Conference 12-15 September 2010, University of Urmia, Urmia, Iran.
5. Talking about "*ON NON-PROPER ACTIONS ON THE DE SITTER SPACE*", 42nd Annual Iranian Mathematics Conference 5-8 September 2011, Vali-e-Asr University of Rafsanjan, Iran.
6. Talking about "*ON CLOSED SUBGROUPS OF THE ISOMETRY GROUP OF THREE DIMENSIONAL MINKOWSKI SPACE*", 42nd Annual Iranian Mathematics Conference 5-8 September 2011, Vali-e-Asr University of Rafsanjan, Iran.
7. Talking about "*Riemannian principal orbits in Minkowski space with cohomogeneity one*", The Sixth Seminar on Geometry and Topology (6SGT), 18-20 September 2011, University of Bonab, Iran.
8. Talking about "*Some notes on the isometric action of $SL(2;R)$ on the de Sitter space S_1^2* ", 43rd Annual Iranian Mathematics Conference, University of Tabriz, 27 - 30 August 2012, Tabriz, Iran.
9. Talking about "*On the causal character of the orbits in cohomogeneity one Minkowski space*", 43rd Annual Iranian Mathematics Conference, University of Tabriz, 27 - 30 August 2012, Tabriz, Iran.
10. Talking about "*Cohomogeneity one actions of a Heisenberg Lie group on some Lorentz manifolds*", The 7th Seminar on Geometry and Topology, Iran University of Science and Technology, 29 - 30 January 2014, Tehran-Iran.
11. Talking about "*Cohomogeneity one Three dimensional Hyperquadrics*", The 8th Seminar on Geometry and Topology, Amirkabir University of Technology, 13 - 17 December 2015, Tehran-Iran.
12. Talking about "*From Riemannian to Pseudo-Riemannian: Low-Cohomogeneity G-Manifolds*", 13th Biennial Seminar on Geometry and Topology, School of Mathematics, IPM, Tehran September 13-16, 2025. (Invited Speaker)

TEACHING EXPERIENCE:

Foundations of Geometry, Mathematical Analysis (I), Foundations of Mathematics, Differential Equations, Differential Geometry, Calculus, General Topology, *Algebraic Topology*, *Geometry of Manifolds (IASBS)*, *Geometry of Manifolds II (Zanjan University)*, *Lie groups and Lie Algebras*.

AWARDS:

B.Sc. Top Student.