



CURRICULUM VITAE (CV)

Updated: May 2019

BIOGRAPHICAL DATA:

Family Name: Kamani

First Name: Davoud

Date of Birth: 20/02 /1968, Iran

Country: Iran

Nationality: Iranian

Mail Address:

Physics Department, Amirkabir University of Technology (Tehran Polytechnic)

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EDUCATIONS:

B.Sc.: Electronic Engineering, transferred to Physics, Shiraz University,
1987-1992.

M.Sc.: Physics, Sharif University of Technology, 1992-1994.

Subject of M.Sc. Thesis: *“Inhomogeneous Cosmological Models”* .

Ph.D.: Theoretical High Energy Physics, Sharif University of Technology, 1994 – 1999.

Subject of Ph.D. Thesis: “*Mixed Branes in Boundary State Formalism*” .

Associate professor: since 2008

Full professor: since 2014

Job Records:

- 1) Institute for Studies in Theoretical Physics and Mathematical (IPM),
- 2) Amirkabir University of Technology (Tehran Polytechnic), Physics Department.

LIST OF PUBLISHED PAPERS:

1. [arXiv:1904.08207](https://arxiv.org/abs/1904.08207)
Title: Scattering of the Kalb-Ramond State from a Dynamical Dp -brane with Background Fields
Authors: [Davoud Kamani](#) and [Elham Maghsoodi](#)
Journal-ref: Nucl. Phys. **B 942** (2019) 381-392
2. [arXiv:1903.10775](https://arxiv.org/abs/1903.10775)
Title: Effective Action of a Dynamical Dp -brane with Background Fluxes
Authors: [Shiva Heidarian](#) and [Davoud Kamani](#)
Journal-ref: Eur. Phys. J. **C** (2019) **79**: 263
3. [arXiv:1806.10631](https://arxiv.org/abs/1806.10631)
Title: Fractional Dp -Branes with Transverse and Tangential Dynamics in the Presence of Background Fluxes
Authors: [Shiva Heidarian](#) and [Davoud Kamani](#)
Journal-ref: Int. J. Mod. Phys. **A 33**, 1850107 (2018)
4. [arXiv:1707.08383](https://arxiv.org/abs/1707.08383)
Title: Fractional-Wrapped Branes with Rotation, Linear Motion and Background Fields
Authors: [Elham Maghsoodi](#) and [Davoud Kamani](#)
Journal-ref: Nucl. Phys. **B 922** (2017) 280-292

5. [arXiv:1704.04632](#)
Title: Interaction of Dynamical Fractional Branes with Background Fields: Superstring Calculations
Authors: [Maryam Saidy-Sarjoubi](#) and [Davoud Kamani](#)
Journal-ref: Int. J. Mod. Phys. **A 32**, 1750069 (2017)
6. [arXiv:1704.03214](#)
Title: Interaction of the branes in the Presence of the Background Fields: the Dynamical Non-intersecting Perpendicular Wrapped-Fractional Configuration
Authors: [Elham Maghsoodi](#) and [Davoud Kamani](#)
Journal-ref: Int. J. Mod. Phys. **A 32**, 1750063 (2017)
7. [arXiv:1508.02084](#)
Title: Moving Fractional Branes with Background Fields: Interaction and Tachyon Condensation
Authors: [Maryam Saidy-Sarjoubi](#) and [Davoud Kamani](#)
Journal-ref: Phys. Rev. **D 92**, 046003 (2015)
8. [arXiv:1501.02453](#)
Title: Resistance of a Rotating-Moving Brane with Background Fields Against Collapse
Author: [D. Kamani](#)
Journal-ref: Annals of Physics **354** (2015) 394-400
9. [arXiv:1410.4948](#)
Title: Tachyon Condensation on a Nonstationary D p -brane with Background Fields in Superstring Theory
Authors: [F. Safarzadeh-Maleki](#) and [D. Kamani](#)
Journal-ref: Phys. Rev. **D 90**, 107902 (2014)
10. [arXiv:1406.2667](#)
Title: Rotating-Moving D-Branes with Background Fields in the Superstring Theory
Authors: [F. Safarzadeh-Maleki](#) and [D. Kamani](#)
Journal-ref: J. Exp. Theor. Phys. **119** (2014) 677-686 [Zh. Eksp. Theor. Phys. **146**: 769 - 778, 2014]
11. [arXiv:1402.7260](#)
Title: Attached open strings on a D p -brane in the backgrounds of the pp-wave and Linear dilation
Author: [D. Kamani](#)
Journal-ref: Annals of Physics **357** (2015) 59 - 63

12. Title: Open String in the Presence of the pp-wave, Linear Dilaton and Kalb-Ramond Backgrounds
Authors: [M. Zoghi](#) and [D. Kamani](#)
Journal-ref: J. Exp. Theor. Phys. **119** (2014) 70 - 74 [Zh. Eksp. Theor. Phys. **146**: 82 - 86, 2014]
13. [arXiv:1312.5489](#)
Title: Rotating and Moving D-Branes in the Presence of Various Background Fields
Authors: [F. Safarzadeh-Maleki](#) and [D. Kamani](#)
Journal-ref: Phys. Rev. **D 89**, 026006 (2014)
14. [arXiv:1308.5303](#)
Title: Non-commutative Dp-Brane in General Background Fields
Authors: [M. Zoghi](#) and [D. Kamani](#)
Journal-ref: Braz. J. Phys. **44** (2014) 102 - 107
15. [arXiv:1301.2874](#)
Title: Some \mathbf{Z}_2 -invariant Variables: Constructed of the Scalars Dilaton and Axion
Authors: [D. Kamani](#)
Journal-ref: Eur. Phys. J. **C 74** (2014) 2846
16. [arXiv:1107.1183](#)
Title: Interaction of Moving Branes with Background Massless and Tachyon Fields in Superstring Theory
Authors: [Z. Rezaei](#) and [D. Kamani](#)
Journal-ref: Zh. Eksp. Theor. Phys. **141**: 267-275, 2012; J. Exp. Theor. Phys. **114**: 234-242, 2012
17. [arXiv:1107.0380](#)
Title: Moving Branes with Background Massless and Tachyon Fields in the Compact Spacetime
Authors: [Z. Rezaei](#) and [D. Kamani](#)
Journal-ref: Braz. J. Phys. **41**:177-183,2011
18. [arXiv:1106.2097](#)
Title: Moving Branes in Presence of the Background Tachyon Fields
Authors: [Z. Rezaei](#) and [D. Kamani](#)
Journal-ref: Zh. Eksp. Theor. Phys. **140**: 1096-1102, 2011 ; J. Exp. Theor. Phys. **113**:956-962, 2011
19. Title: Linear dilaton conformal field theory: a generalization
Author: [D. Kamani](#)
Journal-ref: In. J. Phys. **85**: 1535-1549, 2011.

20. [arXiv:1012.5476](#)
Title: Two Moving-Angled 1-Branes with Electric Fields in a Partially Compact Spacetime
Authors: [D. Kamani](#) and [N. Nowrouzi](#)
Journal-ref: Braz. J. Phys. **41**: 44-49, 2011
21. [arXiv:1006.5512](#)
Title: Schwinger Effect in Non-parallel D1-branes: A Path Integral Approach
Authors: [A. Jahan](#) and [D. Kamani](#)
Journal-ref: Int. J. Mod. Phys. **A 25**:4301-4310, 2010
22. [arXiv:0904.2721](#)
Title: $(p+1)$ -Algebra for Super p -Brane: the Nambu Bracket Reformulation
Author: [D. Kamani](#)
Journal-ref: Zh. Eksp. Theor. Phys.**139**:910-914, 2011; J. Exp. Theor. Phys.**112**:794-798,2011
23. [arXiv:0901.2005](#)
Title: Conformal Field Theory with Two Kinds of Bosonic Fields and Two Linear Dilatons
Author: [D. Kamani](#)
Journal-ref: Braz. J. Phys. **40**: 375, 2010
24. [arXiv:0710.3230](#)
Title: Superstring in the Presence of the Worldsheet Gauge Field
Author: [D. Kamani](#)
Journal-ref: Int. Rev. Phys. **2**: 210-217, 2008
25. [arXiv:0704.3160](#)
Title: New Form of the T-Duality Due to the Stability of a Compact Dimension
Author: [D. Kamani](#)
Journal-ref: Int. J. Theor. Phys. **48** (2009) 611-620
26. [arXiv:0704.0752](#)
Title: Actions for the Bosonic String with the Curved Worldsheet
Author: [D. Kamani](#)
Journal-ref: Braz. J. Phys. **38**: 268-271, 2008
27. [arXiv:hep-th/0611339](#)
Title: Cosmological Constant of the $(p+1)$ -Dimensional World, Embedded in the d -Dimensional Bulk Space
Author: [D. Kamani](#)
Journal-ref: Int. J. Theor. Phys. **47**: 1533-1541, 2008

28. [arXiv:hep-th/0610216](https://arxiv.org/abs/hep-th/0610216)
Title: Supersymmetric Form of the String Action in the Presence of the Gauge Field
Author: [D. Kamani](#)
Journal-ref: Can. J. Phys. **87**: 695-701, 2009
29. [arXiv:hep-th/0610017](https://arxiv.org/abs/hep-th/0610017)
Title: Fermions in the Presence of the Antisymmetric Fields
Author: [D. Kamani](#)
Journal-ref: Int. Rev. Phys. **2** (2008)160-164
30. [arXiv:hep-th/0609103](https://arxiv.org/abs/hep-th/0609103)
Title: The Nambu-Goto and Polyakov Strings via the Relativistic Particles
Author: [D. Kamani](#)
Journal-ref: Mod. Phys. Lett. **A 24** (2009) 2787-2796
31. [arXiv:hep-th/0609036](https://arxiv.org/abs/hep-th/0609036)
Title: Bosonization and Fermionization of the Superstring Oscillators
Author: [D. Kamani](#)
Journal-ref: Int. J. Theor. Phys. **46**: 2725, 2007
32. [arXiv:hep-th/0404035](https://arxiv.org/abs/hep-th/0404035)
Title: Ghosts in the Matter Forms
Author: [D. Kamani](#)
Journal-ref: Adv. Theor. Math. Phys. **9** (2005) 729-747
33. [arXiv:hep-th/0308017](https://arxiv.org/abs/hep-th/0308017)
Title: Noncommutativity and Its Freedoms Due to the PP-Wave and Background Gauge Fields
Author: [D. Kamani](#)
Journal-ref: Mod. Phys. Lett. **A18** (2003) 2125-2133
34. [arXiv:hep-th/0304236](https://arxiv.org/abs/hep-th/0304236)
Title: PP-Wave Strings from Membrane and from String in the Spacetime with Two Time Directions
Author: [D. Kamani](#)
Journal-ref: Phys. Lett. **B 564** (2003) 123-131
35. [arXiv:hep-th/0301003](https://arxiv.org/abs/hep-th/0301003)
Title: Strings in the pp-wave Background from Membrane
Author: [D. Kamani](#)
Journal-ref: Phys. Lett. **B 580** (2003) 257-264

36. [arXiv:hep-th/0212088](https://arxiv.org/abs/hep-th/0212088)
Title: Closed Superstring in Noncommutative Compact Spacetime
Author: [D. Kamani](#)
Journal-ref: Mod. Phys. Lett. **A 17**: 2443-2452, 2002
37. [arXiv:hep-th/0210253](https://arxiv.org/abs/hep-th/0210253)
Title: Noncommutativity Parameter As a Field on the String Worldsheet
Author: [D. Kamani](#)
Journal-ref: Phys. Lett. **B 548** (2002) 231-236
38. [arXiv:hep-th/0207055](https://arxiv.org/abs/hep-th/0207055)
Title: SL(2;R) Duality of the Noncommutative DBI Lagrangian
Author: [D. Kamani](#)
Journal-ref: Int. J. Theor. Phys. **44** (2005) 21-34
39. [arXiv:hep-th/0205189](https://arxiv.org/abs/hep-th/0205189)
Title: Space-Time Symmetries, T-Duality and Gauge Theory
Author: [D. Kamani](#)
Journal-ref: Phys. Lett. **B 541** (2002) 406-410
40. [arXiv:hep-th/0112153](https://arxiv.org/abs/hep-th/0112153)
Title: Noncommutativity and the Motion of D p -brane along Itself
Author: [D. Kamani](#)
Journal-ref: Europhys. Lett. **57** (2002) 672-676
41. [arXiv:hep-th/0110019](https://arxiv.org/abs/hep-th/0110019)
Title: Noncommutativity of the Moving D2-brane Worldvolume
Author: [D. Kamani](#)
Journal-ref: Mod. Phys. Lett. **A 18**: 2195-2205, 2003
42. [arXiv:hep-th/0107184](https://arxiv.org/abs/hep-th/0107184)
Title: T-duality and Noncommutative DBI Action
Author: [D. Kamani](#)
Journal-ref: Mod. Phys. Lett. **A 17** (2002) 237-244
43. [arXiv:hep-th/0104089](https://arxiv.org/abs/hep-th/0104089)
Title: General Target Space Duality and Its Effects on D-branes
Author: [D. Kamani](#)
Journal-ref: Nucl. Phys. **B 601** (2001) 149-168
44. [arXiv:hep-th/0102141](https://arxiv.org/abs/hep-th/0102141)
Title: Some Consequences of Noncommutative Worldsheet of Superstring
Author: [D. Kamani](#)
Journal-ref: Mod. Phys. Lett. **A 19** (2004) 375-383

45. [arXiv:hep-th/0010019](https://arxiv.org/abs/hep-th/0010019)
Title: T-Duality and Mixed Branes
Author: [D. Kamani](#)
Journal-ref: Phys. Lett. **B 487** (2000) 187-191
46. [arXiv:hep-th/0008020](https://arxiv.org/abs/hep-th/0008020)
Title: Noncommutative Superstring Worldsheet
Author: [D. Kamani](#)
Journal-ref: Eur. Phys. J. **C 26**: 285-291, 2002
47. [arXiv:hep-th/9911146](https://arxiv.org/abs/hep-th/9911146)
Title: Mixed Branes Interaction in Compact Spacetime
Authors: [H. Arfaei](#) and [D. Kamani](#)
Journal-ref: Nucl. Phys. **B 561** (1999) 57-76
48. [arXiv:hep-th/9910043](https://arxiv.org/abs/hep-th/9910043)
Title: Moving Mixed Branes in Compact Spacetime
Author: [D. Kamani](#)
Journal-ref: Mod. Phys. Lett. **A 15** (2000) 1655-1664
49. [arXiv:hep-th/9909167](https://arxiv.org/abs/hep-th/9909167)
Title: Branes with Background Fields in Boundary State Formalism
Authors: [H. Arfaei](#) and [D. Kamani](#)
Journal-ref: Phys. Lett. **B 452** (1999) 54
50. [arXiv:hep-th/9909079](https://arxiv.org/abs/hep-th/9909079)
Title: Mixed Branes at Angle in Compact Spacetime
Author: [D. Kamani](#)
Journal-ref: Phys. Lett. **B 475** (2000) 39-45

Book:

An Introduction to the Bosonic String Theory in the Conformal Field
Theory Method - Amirkabir University press 2013

Graduate Students:

- a) **7** graduated Ph.D. students
- b) **40** graduated M.Sc. students

Editorial member of the journals:

- 1 - Universal Journal of Physics and Application, Since 2013,
- 2 - International Journal of Physical, Chemical and Mathematical Sciences (IJPCMS), Since 2013,
- 3 - SCIREA Journal of Physics, Since 2018.

STATEMENTS OF RESEARCH INTERESTS

Special interests are as in the following:

- Branes interaction,
- D-brane dynamics,
- Various dualities,
- Various compactifications of string theory,
- Noncommutativity in the string theory,
- Strings in the pp-wave background, Non-critical string theory,
- Two-time string theory,
- String field theory,
- AdS/CFT correspondence,
- Supergravity,
- Supersymmetry,
- Braneworld,
- Geometry and Topology
- Various subject of particle physics
- Quantum gravity
- Field theory
- Mathematical physics
- General relativity
- Cosmology
- Beyond of standard model
- and so on.

Management:

- 1) Vice head of Faculty of Physics: 2006 - 2015.
- 2) Vice head of High Energy Physics and Cosmology Group, Since April 2012.
- 3) Member of Committee of electing the faculty members.

Schools and workshops:

I have participated in the various international schools and workshops.

Awards:

- 1) In the global entrance examinations I acquired the following grades:
 - 1-1. The second in the M.S. examination in the year 1992.
 - 1-2. The first in the Ph.D. examination of dispatch in the year 1993.
 - 1-3. The second in the Ph.D. examination of Sharif University of technology in the year 1994.
- 2) I was distinguished between:
 - 2-1. Educated B.S. students in the year 1992 in Shiraz University.
 - 2-2. Educated M.S. students in the year 1994 in Sharif University of Technology.
 - 2-3. Educated Ph.D. students in the years 1999 and 2000 in Sharif University of Technology.
- 3) During the years 1994-1999, I was prosperous of a grant from the **IPM** institute.
- 4) I was a distinguished scientific member of the Amirkabir University of Technology (Tehran Polytechnic) in the year 2013.