

Curriculum Vitae

Name: Farhad Ardalan
Date of Birth: Nov.3, 1939
Place of Birth: Tehran - Iran
Degrees:

- Ph.D., 1970, Physics, Pennsylvania State University, USA
- M.S., 1966, Physics, Columbia University, USA
- B.S., 1963, Physics, Columbia University, USA

Address:

1. Department of Physics, Sharif University of Technology, P.O. Box 11365-9161, Tehran-Iran.
2. School of Particle and Accelerators, Institute for Research in Fundamental Sciences (IPM), P.O. Box 19395 - 5746, Tehran-Iran.

Tel: (0098-21)66164504
(0098-21)22809150, 23975828
Fax: (0098-21)22809148
email: ardalan@physics.sharif.ir, ardal an@ipm.ir

POSITIONS AND ACADEMIC ACTIVITIES:

1. Professor Emeritus, Sharif University, 2009
2. Senior Fellow, IPM (Institute for Research in Fundamental Sciences),
3. Fellow of American Physical Society, 2010
4. Fellow of TWAS (The World Academy of Sciences), 2000
5. Khawrazmi Award, 1999
6. Chairman, School of Physics, IPM. 1998-2004, and 1993-1996

7. Professor, Sharif University of Technology 1982-2010
8. Adjunct Professor, University of Cincinnati, Ohio, USA, 1995-2003
9. Assistant Professor, Sharif University of Technology, Tehran, Iran, 1970-1978.
10. Visiting Professor, Yale University, USA, 1973-74.
11. Visiting Professor, The State University of New York at Stony Brook, 1976-77
12. Associate Professor, Mazandaran University, 1978-82.
13. Associate in International Center for Theoretical Physics (ICTP), 1986-92. Senior Associate 1992- 1996
14. Chairman, Physics Department, Sharif University, 1989-91.
15. Member of Academic Council, Institute for Studies in Theoretical Physics and Mathematics (IPM), Tehran, 1989- .
16. Supervisor of 14 Ph.D. Theses 1988-
17. Member of the Board of Trustees of IPM 2005-2009

LIST OF PUBLICATIONS:

1. F. Ardalan and C.P. Boyer, *On the decomposition $SO(p,1) \subset SO(p-1,1)$ for the most degenerate representations*, JMP 12 (1971) 2070
2. F. Ardalan, *Limit of the most degenerate representation of $SO(p,1)$* , JMP 15 (1974) 625
3. F. Ardalan and F. Mansouri, *Quantum theory of dual relativistic parastring models*, Phys. Rev. 12D (1974) 3341.
4. F. Ardalan and G.N. Fleming, *Spinor field theory on a seven dimensional homogeneous space of the poincare group*, JMP 16 (1974) 3341.
5. F. Ardalan, *Classical solutions of $SO(3,1)$ gauge theory*, Phys. Rev. 17D (1978) 1131
6. F. Ardalan, *Self-dual euclidean gauge fields for semisimple groups*, Phys. Rev. 18D (1978) 1960.
7. F. Ardalan and H. Arfaei, *Quotient space solutions of eleven dimensional supergravity*, Gen. Rel. Grav. 18 (1986) 675
8. F. Ardalan and H. Arfaei, *Quotient of manifolds by discrete subgroups*, JMP 28 (1987) 685.
9. F. Ardalan and H. Arfaei, *Critical dimensions for loops in a string model*, Phys. Lett. 175B (1986) 164
10. F. Ardalan and F. Mansouri, *Critical dimensions of parastrings*, Phys. Lett. 176B (1986) 99.
11. F. Ardalan and F. Mansouri, *Interacting parastrings*, Phys. Rev. Lett. 23 (1986) 2456.

12. F. Ardalan, H. Arfaei and J. Parvizi, *Physical regularizations and finiteness of superstring theories*, Modern Phys. Lett. A 1 (1986) 365.
13. F. Ardalan, H. Arfaei and A. Shafei Dehabad, *Multi-loop amplitudes for open bosonic strings*, Sharif Univ. Preprint 1984.
14. F. Ardalan and H. Arfaei, *Modular invariant partition functions for strings moving on group manifolds*, Proceedings of the IInd Regional Conference on Mathematical Physics, Adana, Turkey, Sept. 1987.
15. F. Ardalan, H. Arfaei, M. Zarkesh, *Theta function representation of modular group for $SU(n)$* , JMP. 30 (1989), 1918.
16. F. Ardalan, H. Arfaei, and A. Shafei-Deh-abad, *Belavin-Knizhnik formula for open bosonic strings*, Mod. Phys. Letts. A (1989) 375.
17. F. Ardalan, H. Arfaei, *Toroidal compactification, modular invariants, and orbifolds*. IIIrd Regional Conference on Math. Phys. Feb. 1989, Islamabad, Eds. F. Hussain and A. Quadir, (World Scientific, Singapore, 1989).
18. F. Ardalan, H. Arfaei, and S. Rouhani, *ADE series and quantum symmetries*, Proceedings. IV the Regional Conference on Math. Phys., Tehran, May 1990, Eds. F. Ardalan, H. Arfaei, S. Rouhani (Sharif Univ. Press, Tehran).
19. F. Ardalan, H. Arfaei, and S. Rouhani, *$SU(2)$ modular invariant partition functions from orbifolds*, Int. J. Mod. Phys. A6(1991) 4763
20. F. Ardalan, *Modular invariant partition functions for $SU(3)$* , Proceedings of the Vth Regional Conference on Mathematical Physics, Edirne, Turkey 1992.

21. F. Ardalan, *2D blackholes and 2D gravity*, 1992 Proceedings of Conference on Low Dimensional Topology and Field Theory, Newton Inst., Cambridge, U.K., Plenum Press, 1992.
22. M. Alimohammadi, F. Ardalan, and H. Arfaei, *Gauging $SL(2,R)$ and $SL(2,R) \times U(1)$ by their nilpotent subgroups*, Int. J. Mod. Phys. A10(1995) 115
23. M. Abolhassani, F. Ardalan, *A unified scheme for modular invariant partition functions of WZW models*. Int. J. Mod. Phys. A9(1994) 2707
24. M. Alimohammadi and F. Ardalan, *Vertex operators of $SL(2,R)$ black hole and 2D gravity*, Proceedings of Rakhof Conference, 1994.
25. F. Ardalan, *Gauging of $SL(2,R)$ WZWN models and Liouville field*, Theoretical and Mathematical physics 98, No 3(1994) 337
26. F. Ardalan and M. Alimohammadi, *2D gravity as a limit of $SL(2,R)$ blackhole*, Mod. Phys. Lett. A10(1995) 2485
27. F. Ardalan and A. M. Ghezelbash, *Vector-chiral equivalence in null gauged WZNW theory*, Modern Physics Letters A9(1994)3749
28. F. Ardalan and K. Kaviani, *Chiral perturbation theory in the framework of non-commutative geometry*. Int. J. Mod. Phys. A11(1996) 1509.
29. M. Alishahiha, F. Ardalan, and F. Mansouri, *The moduli space of $N=2$ supersymmetric G_2 Yang-Mills theory*, Phys. Lett. B 381(1996)446
30. F. Ardalan, S. Kim and F. Mansouri, *Can we have exact supersymmetry with undetected superpartners? Some lessons from 2+1 dimensions* , Int. J. Mod. Phys., 12A(1997) 1183
31. F. Ardalan, and A. H. Fatollahi, *Point-like structure in string theory and non-commutative geometry*, Phys. Lett. B 408(1997) 157

32. F. Ardalan, and F. Mansouri, *Non-commutative geometry and the two superbody problem in Chern Simons supergravity*, Proceedings of the 21st international conference on group theoretical methods in physics, Goslar, Germany, 1996, in Group21, physical applications and mathematical aspects of geometry, groups, and algebras, vol. 2, H.D. Doebner, W. Scherer, C. Schulte, ed., World Scientific Singapore, 1996
33. F. Ardalan, A. H. Fatollahi, K. Kaviani, and S. Parvizi, *A matrix model for static configurations of M theory*, Euro. Phys. J. C 8(1999) 507, hep-th/9709037
34. F. Ardalan, and H. Arfaei, and M.M. Sheikh Jabbari, *Mixed branes and m(atrrix) theory on noncommutative torus*, Proceedings of the PAS- COS98 conference
35. F. Ardalan, H. Arfaei, and M.M. Sheikh Jabbari, *Noncommutative geometry from strings and branes*, JHEP02(1999)016, hep-th/9810072
36. F. Ardalan, *String theory, matrix model, and noncommutative geometry*, hep-th/9903117, Proceedings of DPF, APS, 1999
37. F. Ardalan, H. Arfaei, and M.M. Sheikh Jabbari, *Dirac quantization of open strings and noncommutativity in brane*, Nuclear Phys. B576 (2000) 578, hep-th/9906161
38. F. Ardalan, *Large extra dimension and noncommutative geometry in string theory*, hep-th/9910064
39. F. Ardalan and N. Sadooghi, *Axial anomaly in non-commutative QED on R^4* , Int. J. Mod. Phys. A 16 (2001) 3151, hep-th/0002143

40. F. Ardalan, *Noncommutativity in string theory and large extra dimensions*, Turk J. Phys. 24 (2000) 221 Regional Conference on Mathematical Physics IX, Feza Gursey Institute, Istanbul, August 1999
41. F. Ardalan, S. Fernando and F. Mansouri, *Some aspects of the black hole in 2+1 dimensions*, Proceeding of Wigner conference 1999 Istanbul, Turkey
42. F. Ardalan and N. Sadooghi, *Anomaly and nonplanar diagrams in non-commutative gauge theories*, Int. J. Mod. Phys. A17 (2002) 123-144, hep-th/0009233
43. F. Ardalan, H. Arfaei, M.R. Garousi and A. Ghodsi, *Gravity on non-commutative D-branes*, Int. J. Mod. Phys. A 18 (2003), 1051-1066, hep-th/0204117
44. F. Ardalan and N. Sadooghi, *Exact Wilsonian effective superpotential for noncommutative N=1 supersymmetric U(1)*, Proceedings of XI Regional Conference on Mathematical Physics, 3-6 May 2004, p162-165, Tehran, Iran
45. F. Ardalan and N. Sadooghi, *Planar and nonplanar konishi anomalies and exact Wilsonian effective superpotential for noncommutative N=1 supersymmetric U(1)*, Int. J. Mod. Phys. A 20 (2005), 2859-2892, hep-th/0307155
46. F. Ardalan, H. Arfaei and N. Sadooghi, *On the Anomalies and Schwinger terms in noncommutative gauge theories*, to appear in Int. J. Mod. Phys. A, hep-th/0507230
47. F. Ardalan, *Brane cosmology with string antisymmetric field*, Proceeding of the 12th Regional Conference on Mathematical Physics 27 March-1 April 2006 Islamabad, Pakistan, 73-78

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49. M. Alishahiha and F. Ardalan, *Central charge for 2D gravity on AdS(2) and AdS(2)/CFT(1) Correspondence*, JHEP 08 (2008), 079
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51. N. Sadooghi and F. Ardalan, *Translational invariant noncommutative gauge theory*, Phys. Rev. D83 (2011), 025014
52. F. Ardalan, M. Ghasemkhani and N. Sadooghi, *On the mass spectrum of noncommutative Schwinger model in Euclidean R^2 Space*, Eur. Phys. J. C71 (2011), 1606
53. CMS Collaboration, *Observation of a new boson at a Mass of 125GeV with the CMS experiment at the LHC*, Phys. Lett. B716 (2012), 30-61
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55. F. Ardalan, H. Arfaei, M. Ghasemkhani and N. Sadooghi, *Gauge invariant cutoff QED*, Phys. Scripta 03 (2013), 035101
56. F. Ardalan, *Cutoff function in holographic RG flow*, Phys. Rev. D 99 (2019) 10, 106016 eprint: 1902.09123