CURRICULUM VITAE

Javad Komijani

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Education and Research Experience

2023—	Senior Postdoctoral Researcher, **ETH Zurich**
2021-2023	Postdoctoral Researcher, **ETH Zurich**
2019-2020	Postdoctoral Researcher, **University of Tehran**
2017-2018	Postdoctoral Researcher, **University of Glasgow**
2015-2017	Postdoctoral Researcher, **Technical University of Munich**
2010-2015	Ph.D. in Physics, **Washington University in St. Louis**
Thesis Title	Topics in Lattice Gauge Theory and Theoretical Physics
Advisors	Prof. Claude Bernard and Prof. Carl M. Bender
2006-2009	M.Sc. in Electrical Engineering, **University of Tehran**
2002-2006	B.Sc. in Electrical Engineering, **University of Tehran**

Teaching Experience

2021—2023	Preparing master students to conduct their proseminar projects, Teaching Assistant, ETH
Fall 2019	*Workshop on Lattice QCD (with Monte Carlo Simulations)*, Instructor, University of Tehran
Winter 2018	*C Programing under Linux*, Teaching Assistant, University of Glasgow
Spring 2016	*Elementary Particle Physics*, Teaching Assistant, Technical University of Munich
Spring 2016	*Quantum Mechanics*, Teaching Assistant, Technical University of Munich
Fall 2015	*Quantum Field Theory*, Teaching Assistant, Technical University of Munich
Spring 2015	*Statistical Mechanics*, Teaching Assistant, Washington University in St. Louis
Fall 2013	*Quantum Mechanics*, Teaching Assistant, Washington University in St. Louis
Fall 2012	*Physics I*, Teaching Assistant, Washington University in St. Louis
Spring 2011	*Physics II*, Teaching Assistant, Washington University in St. Louis
Spring 2011	*Special Relativity*, Teaching Assistant, Washington University in St. Louis
Spring 2006	*Engineering Mathematics*, Teaching Assistant, University of Tehran
Spring 2006	*Electronics Lab I*, Teaching Assistant, University of Tehran

Fall 2005 *Engineering Mathematics*, Teaching Assistant, University of Tehran

Summer 2005 *Electronics Lab II*, Teaching Assistant, University of Tehran

Computer Skills

Python, Cython, C/C++, Bash

MATLAB, Mathematica

Public Scripts

normflow_ Normalizing flow for generating lattice field configurations

meson_mass A package for mesons masses from lattice-QCD simulations

Selected Publications

[1] J. Komijani, "First-order nonlinear eigenvalue problems involving functions of a general oscillatory behavior," *J. Phys. A: Math. and Theor. 54, 465202 (2021)* [arXiv:2107.02475]

[2] J. Komijani, P. Petreczky and J. H. Weber, "Strong coupling constant and quark masses from lattice QCD," *Prog. Part. Nucl. Phys. 113, 103788 (2020)* [arXiv:2003.11703]
INSPIRE-HEP entry

[3] C.M. Bender, J. Komijani, Q. Wang, "Nonlinear eigenvalue problems for generalized Painlevé equations," *J. Phys. A: Math. and Theor. 52, 315202 (2019)* [arXiv:1903.10640]

[4] C.T.H. Davies *et al.*, "Determination of the quark condensate from heavy-light current-current correlators in full lattice QCD," *Phys. Rev. D 100, 034506 (2019)* [arXiv:1811.04305]
INSPIRE-HEP entry

[5] A. Bazavov *et al.*, "Up-, down-, strange-, charm-, and bottom-quark masses from four-flavor lattice QCD," *Phys. Rev. D 98, 054517 (2018)* [arXiv:1802.04248]
INSPIRE-HEP entry

[6] A. Bazavov *et al.*, "B- and D-meson leptonic decay constants from four-flavor lattice QCD," *Phys. Rev. D 98, 074512 (2018)* [arXiv:1712.09262]
INSPIRE-HEP entry

[7] N. Brambilla , J. Komijani, A.S. Kronfeld, A. Vairo, "Relations between Heavy-light Meson and Quark Masses," *Phys. Rev. D 97, 034503 (2018)* [arXiv:1712.04983]
INSPIRE-HEP entry

[8] J. Komijani, "A discussion on leading renormalon in the pole mass," *JHEP 1708, 062 (2017)* [arXiv:1701.00347]
INSPIRE-HEP entry

[9] C.M. Bender and J. Komijani, "Painlevé Transcendents and $\mathcal{PT}$-Symmetric Hamiltonians," *J. Phys. A: Math. and Theor. 48, 475202 (2015)* [arXiv:1502.04089]

[10] A. Bazavov *et al.*, "Charmed and light pseudoscalar meson decay constants from four-flavor lattice QCD with physical light quarks," *Phys. Rev. D 90, 074509 (2014)* [arXiv:1407.3772] INSPIRE-HEP entry

[11] C.M. Bender, A. Fring and J. Komijani, "Nonlinear Eigenvalue Problems," *J. Phys. A: Math. and Theor. 47, 235204 (2014)* [arXiv:1401.6161]

[12] C. Bernard and J. Komijani, "Chiral Perturbation Theory for All-Staggered Heavy-Light Mesons," *Phys. Rev. D 88, 094017 (2013)* [arXiv:1309.4533] INSPIRE-HEP entry

References

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Andreas S. Kronfeld Fermi National Accelerator Laboratory, ask___at___fnal.gov

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