

Curriculum Vitae

Morteza Nikaeen

Personal Information

Name: Morteza **Family:** Nikaeen **Gender:** Male **Date of Birth:** 1987 **Location:** Tehran, Iran
Nationality: Iranian **Email:** m_nikaeen@Ymail.com **Cell Phone:** +98 (930) 4013167

Educations

Ph.D. Student (Started from 23/09/2014)

Sharif University of Technology, Tehran, Iran

Ph.D. in Physics, 2014-Present, Current GPA: 18.8 / 20

Research Field: Quantum Information

Thesis Title: The role of Quantum Correlations in Quantum Communication Tasks

Supervisor: Professor Alireza Bahrampour

M.Sc. (Finished at 6/12/2013)

Sharif University of Technology, Tehran, Iran

M.Sc. in Physics, 2011-2013, Total GPA: 18 / 20

Research Field: Quantum Optics

Thesis Title: All-Optical Switches Based on Quantum Interference and Coherence

Thesis Grade: 19.3/20

Supervisor: Professor Rasoul Sadighi

B.Sc. (Finished at 21/09/2011)

Kharazmi University, Tehran, Iran

B.Sc. in Physics, 2007-2011, Total GPA: 15.1 / 20

Research Field: Condensed Matter Physics

Project Title: Gravitational Waves Detectors

Project Grade: 20/20

Supervisor: Professor Shahram Khosravi

Projects

- Working on Quantum Key Distribution Protocols, Iran Telecom Research Center, Duration: one year
- Working on Quantum Key Distribution Protocols and their Implementations, Research Center for Quantum Engineering and Quantum Photonics, Tehran, Iran, Duration: two years
- Workshop Presenter (on the QKD Protocols), 25th Iranian conference on Electrical Engineering (ICEE2017), K.N. Toosi University of Technology, Tehran, Iran.
- Workshop Presenter (Discrete variable vs. Continuous Variable QKD Protocols), Iran Telecom Research Center and Sharif University of Technology, Tehran, Iran (Date: will be held at Feb 2018).

Presentations

- Discord Consumption in Dense Coding Protocol, Sharif QI Group, 2018
- Quantum Data Hiding, Quantum Communications Group, Sharif University of Technology, 2017
- Operational Interpretations of Quantum Correlations through Quantum Communication Tasks, Sharif QI Group, 2017
- Quantum Measurement Theory (Mathematical structure and Physical Understanding), Quantum Communications Group, Sharif University of Technology, 2016
- Implementation Techniques for Quantum Key Distribution Protocols, Quantum Communications Group, Sharif University of Technology, 2015
- Laser-Cooling, Advanced Laser Lab, Sharif University of Technology, 2013
- A Decade of Measuring Ultra-short Pulses, Advanced Laser Lab, Sharif University of Technology, 2012

Publications

- Quantum States with equal unlockable correlations and quantum discord (2018. *Physical Review A*, 98(3), p.032320.)
- Quantum Cost for Entanglement Distribution of GHZ States by Separable States (First National Conference in Quantum Information and Open Quantum Systems, Tabriz, Iran, 2018)
- Preparing a Book, titled as Quantum Key Distribution Protocols, in Persian Language, ordered by Iran Telecom Research Center
- Imposing Phase Dependency in Absorption Behavior of a Four-Level Atomic System, (Submitted in JOSA B)

Teaching Experiences

- **Teaching Assistant** in the course of General Physics 1
Physics Dept., Sharif University of Technology, Fall 2014 & Fall 2015
- **Teaching Assistant** in the course of General Physics 2
Physics Dept., Sharif University of Technology, Spring 2014 & Spring 2015
- **Teaching Assistant** in the course of General Physics Labs 1 & 2
Physics Dept., Sharif University of Technology, Spring 2014 & Spring 2015

Computer Skills

Scientific Software Tools: MATLAB, Maple, *Familiar with Mathematica*

Programming Languages: C/C++

Languages

Persian Native

English Fluent

Arabic Fair

References

- Dr. A. Bahrampour, Professor, Sharif Uni. of Tech., Bahrampour@sharif.edu
- Dr. A. Rezakhani, Assistant Professor, Sharif Uni. of Tech., rezakhani@sharif.edu
- Dr. Shahram Khosravi, Associate Professor, IPM. Khosravi@ipm.ir
- Dr. Sara Tofighi, Assistant Professor, Iran Telecom Research Center, s.tofighi@itrc.ac.ir