



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE: 6322

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Fisica - Pure and Applied Quantum Mechanics Group**

Scientist- in - charge: **Prof. Marco Genoni**

Alireza Nourmandipour

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Nourmandipour
Name	Alireza

PRESENT OCCUPATION

Appointment	Structure
Educational and Research Member	Sirjan University of Technology

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree			
Specialization			
PhD	Ph.D. in Atomic and Molecular Physics	Yazd University	2016
Master	Master Degree in Atomic and Molecular Physics	Shiraz University	2012
Degree of medical specialization			
Degree of European specialization			
Other	Visiting PhD Scholar	University of Camerino, Italy	2015



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City
2015		Physics	Tehran

FOREIGN LANGUAGES

Languages	level of knowledge
English	Fluent
Persian	Mothertongue
Italian	Basic words and phrases

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2016	Top Student Among Ph.D. Students of Physics, Entrance 2012, Yazd University, Yazd, Iran
2016	Top Researcher of Year, Faculty of Science, Yazd University, Yazd, Iran
2015	Scholarship For a Visiting Ph.D. Student in Quantum Information Theory at Physics Division, School of Science and Technology, University of Camerino, Camerino, Italy

TRAINING OR RESEARCH ACTIVITY

Postdoctoral Research Fellow at Istituto Nazionale di Ottica, CNR-INO, Firenze, Italy Project: ERA-NET Cofund in Quantum Technologies (QuantERA) “Cavity-Enhanced Quantum Optical Clocks Q-Clocks”
Teaching Courses at Sirjan University of Technology: Quantum Mechanics, Mathematical Physics, Fundamental Physics, Electromagnetism
REVIEWER FOR JOURNALS: Physical Review Letters, Scientific Reports, Physical Review A, Optics Express, International Journal of Modern Physics B

PROJECT ACTIVITY

Year	Project
2020-2021	ERA-NET Cofund in Quantum Technologies (QuantERA) “Cavity-Enhanced Quantum Optical Clocks Q-Clocks”

PATENTS

Patent



CONGRESSES AND SEMINARS

Date	Title	Place
2018	School on Quantum Thermodynamics and Open Quantum Systems	IPM, Tehran, Iran
2019	The Annual Physics Conference of Iran	Tabriz, Iran
2017	National Conference on Quantum Information and	Shahrood, Iran
2016	Conference on Optics and Photonics	Yazd, Iran

Articles in reviews
<u>Alireza Nourmandipour</u> , and Ali Mortezapour, <i>Frequently Modulated Qubits in a Dissipative Cavity: Entanglement Dynamics and Protection</i> , Quantum Inf. Process. 22(6) , 254 (2023).
<u>Alireza Nourmandipour</u> , <i>The effect of the classical driving field on the dynamics of entanglement of two qubits interacting with two dissipative cavities</i> , Iran. J. Phys. Res. 23(1) , 177-186 (2023).
Elham Faraji, <u>Alireza Nourmandipour</u> , Stefano Mancini, Marco Pettini, Roberto Franzosi, <i>Routing a Quantum State in a bio-Inspired Network</i> , Quantum. Inf. Process. 22(6) , 266 (2023).
Azar Vafafard, <u>Alireza Nourmandipour</u> , Roberto Franzosi, <i>Multipartite Stationary Entanglement Generation in the Presence of Dipole-Dipole Interaction in an Optical Cavity</i> , Phys. Rev. A 105 (5) , 052439 (2022).
<u>Alireza Nourmandipour</u> , Azar Vafafard, Ali Mortezapour, Roberto Franzosi, <i>Entanglement Protection of Classically driven qubits in a lossy cavity</i> , Sci. Rep. 11(1) , 16259 (2021).
Mohadese Forozesh, Ali Mortezapour, <u>Alireza Nourmandipour</u> , <i>Controlling qubit-photon entanglement, entanglement swapping and entropic uncertainty via frequency modulation</i> , Eur. Phys. J. Plus 136 , 778 (2021).
Morteza Rafiee, <u>Alireza Nourmandipour</u> , Stefano Mancini, <i>Enforcing entanglement by feedback</i> , Phys. Lett. A 384(29) 126748 (2020).
Sare Golkar, Mohammad K Tavassoly, <u>Alireza Nourmandipour</u> , <i>Entanglement dynamics of moving qubits in a common environment</i> , J. Opt. Soc. Am. B 37(2) , 400-411 (2020).
Ali Mortezapour, <u>Alireza Nourmandipour</u> , Hossein Gholipour, <i>The effect of classical driving field on the spectrum of a qubit and entanglement swapping inside dissipative cavities</i> , Quant, Infor. Proc. 19(4) , 1-16 (2020).



<p>Sare Golkar, Mohammad K Tavassoly, <u>Alireza Nourmandipour</u>, <i>Qubit Movement-Assisted Entanglement Swapping</i>, Chin. Phys. B 29(5) 050304 (2020).</p>
<p>Mahnaz Ghasemi, Mohammad K Tavassoly, <u>Alireza Nourmandipour</u>, <i>Dissipative entanglement swapping in the presence of detuning and Kerr medium: Bell state measurement method</i>, Eur. Phys. J. Plus 132(12), 1-10 (2017).</p>
<p>Morteza Rafiee, <u>Alireza Nourmandipour</u>, and Stefano Mancini, <i>Universal feedback control of two-qubit entanglement</i>, Phys. Rev. A 96, 012340 (2017).</p>
<p><u>Alireza Nourmandipour</u>, Mohammad K. Tavassoly, <i>Entanglement swapping between dissipative systems</i>, Phys. Rev. A 94, 022339 (2016).</p>
<p><u>Alireza Nourmandipour</u>, Mohammad K. Tavassoly, and Mohammad A. Bolorizadeh, <i>Quantum Zeno and anti-Zeno effects on the entanglement dynamics of qubits dissipating into a common and non-Markovian environment</i>, J. Opt. Soc. Am. B 33, 1723 (2016).</p>
<p>Morteza Rafiee, <u>Alireza Nourmandipour</u>, and Stefano Mancini, <i>Optimal feedback control of two-qubit entanglement in dissipative environments</i>, Phys. Rev. A 94, 012310 (2016).</p>
<p><u>Alireza Nourmandipour</u>, Mohammad K. Tavassoly, and Stefano Mancini, <i>The entangling power of a “glocal” dissipative map</i>, Quantum Inf. Comput. 16, 0969 (2016).</p>
<p><u>Alireza Nourmandipour</u>, Mohammad K. Tavassoly, and Morteza Rafiee, <i>Dynamics and protection of entanglement in n-qubit systems within Markovian and non-Markovian environments</i>, Phys. Rev. A 93, 022327 (2016).</p>
<p>Alireza Nourmandipour and Mohammad K. Tavassoly, <i>Dynamics and protecting of entanglement in two-level systems interacting with a dissipative cavity: the Gardiner-Collett approach</i>, J. Phys. B At. Mol. Opt. 48, 165502 (2015).</p>
<p>Alireza Nourmandipour and Mohammad K. Tavassoly, <i>A novel approach to entanglement dynamics of two two-level atoms interacting with dissipative cavities</i>, Eur. Phys. J. Plus 130, 1-15 (2015).</p>
<p><u>Alireza Nourmandipour</u> and Mohammad K. Tavassoly, <i>f-deformed squeezed vacuum and first excited states, their superposition and the corresponding nonclassical properties</i>, Commun. Theor. Phys. 61, 521-530 (2014).</p>

<p>Congress proceedings</p>
<p>Sare Golkar, Mohammad K. Tavassoly, <u>Alireza Nourmandipour</u>, <i>Entanglement Dynamics of Two Moving Qubits in Both Strong and Weak Coupling Regimes</i> (Poster), The Annual Physics Conference of Iran (Tabriz, Iran, August, 2019).</p>
<p><u>Alireza Nourmandipour</u>, Morteza Rafiee, <i>Entanglement Swapping Using Quantum Jump Approach</i> (oral),</p>



2nd National Conference on Quantum Information and Computation (Shahrood University of Technology, Shahrood, Iran, August, 2017).
<u>Mahnaz Ghasemi</u> , Alireza Nourmandipour, Mohammad K. Tavassoly, <i>Entanglement swapping between atomic systems in the presence of dissipation</i> (oral), The Annual Physics Conference of Iran (Yazd, Iran, August, 2017).
<u>Alireza Nourmandipour</u> , Mohammad K. Tavassoly, <i>Quantum Zeno and anti-Zeno effects on the entanglement dynamics of a collective of qubits in a common dissipative environment</i> (poster) The Annual Physics Conference of Iran (Shiraz, Iran, August, 2016).
<u>Alireza Nourmandipour</u> , Morteza Rafiee, and Mohammad K. Tavassoly, <i>Dynamics of Entanglement of a Collective of Qubits Interacting with a Dissipative Cavity</i> (poster), 22 th Iranian Conference on Optics and Photonics (Yazd, Iran, January, 2016).
<u>Alireza Nourmandipour</u> and Mohammad K. Tavassoly, <i>Dynamics of entanglement of two atoms interacting with two cavities in the presence of dissipation</i> (oral), 20 th Iranian Conference on Optics and Photonics (Tehran, Iran, February, 2014).

OTHER INFORMATION

I have been a co-supervisor of Master's and PhD students.
Organization and Relationships: Excellent ability to organize and manage responsibility tasks, good interpersonal skills and good team working.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

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Place and date: Sirjan, 01/02/2024