



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 6106\_\_\_\_\_

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 Physics

Scientist- \_\_\_\_\_ in \_\_\_\_\_ - \_\_\_\_\_ charge:  
MarcoGenoni\_\_\_\_\_

[Name and surname]Safoura Mirkhalaf

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Mirkhalaf
Name	Safoura

### PRESENT OCCUPATION

Appointment	Structure
postdoct	University of Warsaw

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree			
Specialization			
PhD	Atomic, molecular and photonics		
Master	Atomic and molecular		
Degree of medical specialization			
Degree of European specialization			
Other			



## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City

## FOREIGN LANGUAGES

Languages	level of knowledge
English	Toefl 92

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
Aahus Denmark	Predocctoral scholarship 2011, for 10 months
Italy, florence	2011/2016 malicia project for phd stadies

## TRAINING OR RESEARCH ACTIVITY

description of activity
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## PROJECT ACTIVITY

Year	Project

## PATENTS

Patent

## CONGRESSES AND SEMINARS

Date	Title	Place
<ul style="list-style-type: none"><li>Center of new technologies (CENT), University of Warsaw, Poland, postdoc (2022-2024)</li></ul>		



<ul style="list-style-type: none"><li>• Researcher, Institute of Institute for Research in Fundamental Sciences (2021-2022)</li><li>• University of Tehran, Iran- Postdoc (2021-22)</li><li>• Institute of Physics, Polish Academy of Sciences, Warsaw, Poland as adjunkt (post-doc) (2018-2020)</li><li>• Researcher, Institute of Institute for Research in Fundamental Sciences (2017-2018)</li></ul>		

## PUBLICATIONS


<b>Articles in reviews</b>
<ul style="list-style-type: none"><li>• <u>Safoura Mirkhalaf</u>, Janek Kolodynsky, Klaus Molmer, <i>Continuously measured quantum Gaussian metrology in open system</i>, going to submit soon to PRJ or Quantum soon (2023)</li><li>• <u>Safoura Mirkhalaf</u>, Mohammad Mehboudi, Saleh Rahimi,, <i>Operational significance of nonclassicality in nonequilibrium Gaussian quantum thermometry</i>, arxiv: :2207.10742, submitted for Quantum Science and Technology(2023).</li><li>• <i>Critical quantum thermometry and its feasibility in spin systems</i>, Enes Aybar, Artur Niezgoda, Safoura S Mirkhalaf, Morgan W Mitchell, Daniel Benedicto Orenes, Emilia Witkowska, volume 6, page 808 (2022).</li><li>• <u>S. Mirkhalaf</u>, DB Orenes, MW Mitchell, E Witkowska, <i>Criticality-enhanced quantum sensing in ferromagnetic Bose-Einstein condensates: role of readout measurement and detection noise</i>, Physical Review A 103 (2), 023317 (2021).</li><li>• A Niezgoda, E Witkowska, <u>S Mirkhalaf</u>, <i>Twist-and-store entanglement in bimodal and spin-1 Bose-Einstein condensates</i>, Physical Review A 102 (5), 053315 (2020).</li><li>• <u>S. Mirkhalaf</u>, L. Lepori, E. Witkowka, <i>Supersensitive quantum sensor based on criticality in an antiferromagnetic spinor condensate</i>, Phys. Rev. A <b>101</b>, 043609 (2020).</li><li>• <u>S. Mirkhalaf</u>, S. Nolan, S. Haine, <i>Robustifying twist-and-turn entanglement with interaction-based readout</i> Phys. Rev. A <b>97</b> (2018). <u>Editors suggestion.</u></li><li>• <u>Safoura Mirkhalaf</u> and Augusto Smerzi, “<i>Entanglement detection via quantum Fisher information in a coupled atom-field system</i>”, Phys. Rev. A <b>95</b>, 022302 (2017).</li><li>• <u>Safoura Mirkhalaf</u> and Klaus Mølmer, “<i>Sympathetic Wigner function tomography of a dark trapped ion</i>” Phys. Rev. A <b>85</b>, 042109 (2012).</li></ul>



Congress proceedings
[title, structure, place, year]
[title, structure, place, year]
[title, structure, place, year]

## OTHER INFORMATION


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.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: Safoura Mirkhalaf 4/1/2024 \_\_\_\_\_, \_\_\_\_\_