UNIVERSITÀ DEGLI STUDI DI MILANO

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 PHYSICS UNIVERSITY OF MILAN**

Scientist- in – charge: Prof. Marco Genoni

[Name and surname] THEERTHAGIRI LAKSHMANAN

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	LAKSHMANAN
Name	THEERTHAGIRI

PRESENT OCCUPATION

Appointment	Structure
VISITING STUDENT	RESEARCHER

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	PHD		
Specialization	QUATNUM OPTICS AND INFORAMTION THOERY		
PhD	PHYSICS	UNIVERSITY OF NAPLES FEDERICO II	NOV 2020-DEC 2023
Master	PHYSICS	UNIVERSITY OF MADRAS	2012-2014
Degree of medical specialization			
Degree of European specialization			
Other			

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
ENGLISH	ADVANCED

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award

TRAINING OR RESEARCH ACTIVITY

My research primarily centers around Quantum Sensing, with a specific emphasis on Quantum Illumination theory. In my Quantum Illumination work, I make use of Gaussian Two-Mode Squeezed states within the framework of Continuous Variable Theory to transmit signals to targets while retaining idler states within the controlled laboratory environment. Even when faced with challenges like environmental losses and noise, Quantum Illumination demonstrates significant advantages.

PROJECT ACTIVITY

Year	Project
2021-2023	My research primarily centers around Quantum Sensing, with a specific emphasis on Quantum Illumination theory. In my Quantum Illumination work, I make use of Gaussian Two-Mode Squeezed states within the framework of Continuous Variable Theory to transmit signals to targets while retaining idler states within the controlled laboratory environment. Even when faced with challenges like environmental losses and noise, Quantum Illumination demonstrates significant advantages.
2022-2023	we concentrated on optimizing the time needed to synthesize a representative entangled state through pairwise exchange interactions. We demonstrated that the time required for each step followed an elegant geometric pattern.

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
2023	CONFERENCE	UNIVERSITY OF MILAN
2023	CONFERENCE	ICTP,TRIESTE
2023	SCHOOL	UNIVERSITY OF TEIESTE

PUBLICATIONS

Books
[title, place, publishing house, year …] Microwave Quantum Illumination with Correlation-to-Displacement Conversion" (Phys. Rev. Applied 20, 024030, 2023)
[title, place, publishing house, year …] Spreading Entanglement Through Pairwise Exchange Interactions" Quantum Information Processing volume 22, Article number: 355 (2023)
[title, place, publishing house, year …] Generating Resonating-Valence-Bond States Through Dicke Subradiance" (Phys. Rev. A 96.033829) AND Resonating Valence Bonds and Spinon Pairing in the Dicke Model" (SciPost Phys. 4.6.044)

Articles in reviews
[title of the article, review, place, publishing house, year …]
[title of the article, review, place, publishing house, year …]
[title of the article, review, place, publishing house, year …]

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: _29/01/2024,CAMERINO_____, _____

Università degli Studi di Milano – Direzione Trattamenti Economici e Lavoro Autonomo
Ufficio Contratti di formazione e Ricerca
Via Sant'Antonio 12 - 20122 Milano, Italia
assegni.ricerca@unimi.it