



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 6324

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: Prof. D'Angelo Davide

Vivek Sharma

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Sharma
Name	Vivek

PRESENT OCCUPATION

Graduate Teaching Assistant	2016-2024

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
PhD	Physics	Virginia Tech, USA	2024
Masters	Physics	BITS, Pilani, India	2015

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
2016	American Physical Society	
2019	Sigma Pi Sigma	Blacksburg



FOREIGN LANGUAGES

Languages	level of knowledge
English	Fluent
Hindi	Fluent

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2022	Graduate teaching excellence award

TRAINING OR RESEARCH ACTIVITY

description of activity

PROJECT ACTIVITY

Year	Project
2014	Investigated neutrinoless double beta decay in the left-right symmetric model to place limits on the CP Majorana phase
2015-2016	Developed tool to calculate helicity scattering amplitudes for QED interactions in the Mathematica package FeynCalc
2020	Wrote an adaptive algorithm to improve calibration methods for 988 detectors. Significantly improved calibration for 30% of the detectors
2018-2024	Searching for baryon number violation with CUORE via triple proton decay mode in ^{130}Te . Applying deep learning techniques for signal and background characterization.

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
Nov 2023	Tri-nucleon decay in ^{130}Te with CUORE	DNP Meeting
April 2023	Tri-nucleon decay in ^{130}Te with CUORE	APS April Meeting



2021	Calibration of detector response at CUORE	DNP Meeting
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PUBLICATIONS

D.Q. Adams et al. Search for neutrinoless $\beta + EC$ decay of ^{120}Te with CUORE. Phys. Rev. C, 105:065504, Jun 2022.
Search for Majorana neutrinos exploiting millikelvin cryogenics with CUORE. Nature, 604(7904):53-58, April 2022
D.Q. Adams et al. Measurement of the $2\nu\beta\beta$ Decay Half-Life of ^{130}Te with CUORE. Phys. Rev. Lett., 126:171801, Apr 2021. [title, place, publishing house, year ...]

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: Blacksburg, Virginia, USA, 7th February 2024