## National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

#### Curriculum Vitae

Brief Profile: 1-2 paragraphs (not exceeding 500 words)



**MUMMIDI** 

2. Designation: Assistant Professor

3. Office Address: PH121, Department of Physics, OJAS

Building, NIT Trichy

4. Email (Primary): venkata@nitt.edu

5. Field(s) of Specialization: Beyond Standard Model Physics in

particular Supersymmetry breaking,

Gauge mediation, phenomenology of low energy supersymmetric theories and Dark

matter.

#### 7. Employment Profile

Job Title	Employer	From	То
Research Associate	Indian Institute of Science, Bangalore	Aug 2014	July 2015
Post-Doctoral Fellow	Harish-Chandra Research Institute (HRI), Allahabad	July 2015	July 2017
Post-Doctoral Fellow	Indian Institute of Science Education and Research, Mohali	Jan 2018	March 2019
Assistant Professor	NIT Trichy	June 2020	Till Date

#### 8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
PhD	Indian Institute of Science, Bangalore	2014	NA	Physics
Master of Science	University of Hyderabad	2009	NA	Physics
Bachelor of Science	Ideal College,	2006	First	Physics

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K	Kakinada, India			
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#### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То
BTech Class	Department	2022	Till Date
Coordinator			
MSc Final Year	Department	2020	July 2022
Class Coordinator			
BoS Member	Department	2022	Till Date
DPEC member	Department	2020	July 2022
MIS Coordinator	Department	2020	Till Date

#### 10. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2009	Gold medal	University of Hyderabad

#### 11. Fellowships

Year of Award	Name of the Fellowship	Awarding	From	То
		Organization	(Month/Year)	(Month/Year)
2014	Council of Scientific and	CSIR	July 2014	Dec 2009
	Industrial Research			
	fellowship			

#### 13. Details of Academic Work

(i) Courses taught at Postgraduate and Undergraduate levels

PG: ATOMIC AND MOLECULAR SPECTROSCOPY (PH633), PROBABILITY, STATISTICS, QUALITY AND RELIABILITY (PH616).

UG: PHIR11 – Physics Theory

(ii) Projects guided at Postgraduate level

2020-2021

"THE UNRUH EFFECT" by Dayakrishn Purohit (213219004)

"NEUTRINO OSCILLATION" by Deepu Singh (213219005)

2021-2022

"COMPARISON OF ACCURACY OF VARIOUS APPROXIMATION TECHNIQUES USING THE SPECTRUM OF 1-D DOUBLE-WELL POTENTIALS" by Jagadeesh A M

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(213220009)

"LITHIUM-ION BATTERY INSPECTION" by Shubham Singh Negi (213120019)

## 15. Number of PhDs guided

Name of the PhD	Title of PhD	Role(Supervisor/ Co-	Year of
Scholar	Thesis	Supervisor)	Award
Abhishek	NA	Supervisor	Ongoing

#### 21. Publications

### (A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page	Year	Impact
	•		,	numbers		Factor of
						the
						Journal
						(Optional)
V	Leptogenesis	Journal of High	2021 (12)	pp. 1-26	2021	5.81
Suryanarayana	and fermion	Energy Physics				
Mummidi,	mass fit in a					
Ketan M Patel	renormalizable					
	SO (10) model					
V	Precision	Physical	101 (11)	115008	2020	5.296
Suryanarayana	unification and	Review D				
Mummidi,	Higgsino dark					
Ketan M Patel	matter in GUT					
	scale					
**	supersymmetry	T 1 CTT 1	2010 (1)	1.26	2010	<b>7</b> 01
V	Pseudo-Dirac	Journal of High	2019 (1)	pp. 1-36	2019	5.81
Suryanarayana	Higgsino dark	Energy Physics				
Mummidi, Ketan M Patel	matter in GUT					
Ketan M Patel	scale					
V	supersymmetry Effects of	Journal of High	2018 (8)	pp. 1-33	2018	5.81
· ·			2018 (8)	pp. 1-33	2018	3.81
Suryanarayana Mummidi, PK	heavy neutrinos on vacuum	Energy Physics				
Vishnu, Ketan	stability in two-					
M Patel	Higgs-doublet					
IVI I awi	model with					
	GUT scale					
	supersymmetry					
Pritibhajan	Higgs mass	Journal of High	2017 (28)	pp. 1-55	2017	5.81
Byakti,	from neutrino-	Energy Physics	, , , , , , , , , , , , , , , , , , , ,	rr. 1 00		
Charanjit K	messenger					

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Khosa, V Suryanarayana Mummidi,	mixing					
Sudhir K Vempati						
Abhishek M Iyer, V Suryanarayana Mummidi, Sudhir K Vempati	Gravitational rescue of minimal gauge mediation	International Journal of Modern Physics A	31 (10)	1650045 pp. 1-21	2016	1.381
V Suryanarayana Mummidi	Neutralino- Neutralino pair annihilation crosssections with flavour violation	High Energy Physics - Phenomenology	arXiv preprint arXiv:1412.8270	pp. 1-14	2014	NA
Eung Jin Chun, V Suryanarayana Mummid i, Sudhir K Vempati	Anatomy of Higgs mass in supersymmetric inverse seesaw models	Physics Letters B	736	470-477	2014	2.654
Abhishek M Iyer, V Suryanarayana Mummidi, Sudhir K Vempati	Gravitational rescue of minimal gauge mediation	High Energy Physics - Phenomenology	arXiv preprint arXiv:1408.4462	pp. 1-24	2014	NA
V Suryanarayana Mummidi, Sudhir K Vempati	A little more gauge mediation and the light Higgs mass	Nuclear Physics B	881	181-205	2014	1.683