

CURRICULUM VITAE

NAME : K. VENKATA PHANI LATA
DATE OF BIRTH : 04. 05. 1977
SEX : Female
HUSBAND'S NAME : K. Srinivasan
NATIONALITY : Indian
PRESENT OCCUPATION : Senior Research Fellow,
Indian Institute of Astrophysics,
Koramangala, Bangalore – 560 034.

EDUCATION :

Degree	College/University	Year of passing	Percentage
Board of Secondary Education	Andhra Yuvathi Mandali High School	1992	85 %
Board of Intermediate Education	St. Ann's Junior college for girls (Maths, Physics, Chemistry)	1994	82.7 %
Bachelor of Science Education	Vanitha Maha Vidyalaya, (Affiliated to Osmania Univ.) (Maths, Physics, Chemistry)	1997	80.9 %
Master of Science Education	Hyderabad Central University (Physics)	1999	69 %

THESIS TITLE :

Many-body theory of Electric Dipole Moments and it's Implications for the Standard Model of Particle Physics.

THESIS SUPERVISOR : Bhanu Pratap Das
ADDRESS : Senior Professor,
Indian Institute of Astrophysics,
Koramangala, Bangalore - 560 034.

ACHIEVEMENTS AND FELLOWSHIPS :

1. Qualified in All-India Joint Entrance Screening Test for Ph.D – 1999.
2. Qualified in Joint CSIR-UGC Test for Junior Research Fellowship (JRF) and Eligibility for Lecturership (NET) – 1998.
3. Qualified for Senior Research Fellowship at Indian Institute of Astrophysics, Bangalore.
4. Qualified the eligibility test for Msc in Physics, held by Osmania University and obtained 4th rank in my state.
5. Qualified the eligibility test for Bachelor of Education – 1999 and obtained 42nd rank my state.

CONFERENCES ATTENDED :

1. Participated the IAU colloquium at Kodai Kanal on Solar Physics – December 1999.
2. Participated and presented a talk on “Electric dipole moments” at the XIV DAE symposium held at University of Hyderabad, Hyderabad – December 2000.
3. Participated and presented a poster titled “Electric dipole moment of electron” at the International conference on “Perspectives in Theoretical Physics”, Physical Research Laboratory, Ahmedabad – January 2001.
4. Participated in “Workshop on Parallel Computing”, held at the Institute of Physics, Bhubaneswar – March 2002.
5. Participated in “Recent advances in Atomic, Molecular and Optical Physics”, held at Indian Institute of Science, Bangalore – March 2003.
6. Participated and presented a poster titled “A new many-body theory of Electric Dipole Moments and it' s role in testing the Standard Model” at the 15th National Conference on Atomic and Molecular Physics, December, 2004.
7. Participated and presented a talk on “Theory Electric dipole moments of closed-shell atoms” at the Workshop in Atomic, Molecular and optical Physics, Indian Institute of Astrophysics, Bangalore – November 2005.
8. Invited talk on “Search for T-violation using cold atoms” at the Indo-French workshop , Raman Research Institute, Bangalore – January 2006.

PUBLICATIONS :

1. ‘Electric dipole moment of the electron’, K.V. P. Latha, Sonjoy Majumder, B.P. Das, Proceedings on the XIV DAE symposium on High energy Physics : Edited by A. K. Kapoor, Prasanta K. Panigrahi, Bindu A. Bambah, University of Hyderabad, Hyderabad, December, 1999. Sponsored by Department of Atomic Energy.
2. ‘Relativistic and Correlation effects in Atoms’, B. P. Das, K. V. P. Latha, B. K. Sahoo, C. Sur, R. K. Chaudhuri and D. Mukherjee, Journal of Theoretical and Computational Chemistry, 4, 1 (2005).
3. ‘Electric Quadrupole Moments of the D states of Alkaline-Earth-Metal-ions’, Chiranjib Sur, K. V. P. Latha, Bijaya K. Sahoo, Rajat K. Chaudhuri, and B. P. Das and D. Mukherjee, Phys. Rev. Lett. 96, 193001 (2006) .
4. ‘Atomic electric dipole moments in coupled-cluster and coupled-perturbed Hartree-Fock theories’, K. V. P. Latha, Dilip Angom, Rajat Chaudhuri and B. P. Das (to be submitted to Physical review Letters).

SOFTWARE SKILLS :

- Operating systems : Experienced working with UNIX, LINUX, WINDOWS OS.
- Programming Languages : Fortran 77/90, IDL .
- Software tools : Mathematica, IDL, MExcel, Xfig.
- Documentation Softwares : Microsoft Power Point, Open Office, Prosper, LATEX
- Others : Familiar with parallel programming with Message Passing Interface (MPI), and have worked with parallel computers Intel Xeon (5 node dual CPU) and AMD Opteron (8 node dual CPU) at the Indian institute of Astrophysics and occasionally the PARAM PADMA tera-flop super computer , CDAC Bangalore. Familiar with basics of C, C++ programming.

RESEARCH INTERESTS :

- Theoretical Atomic Physics – Many-body theory and applications.
- Probing of the origin of discrete symmetry violations – Studies of physics beyond the Standard Model.
- Neutrinos and CP violation studies.
- Computational Physics.
- Parallel programming and application of HPC to problems in Physics, Biology and Astrophysics.
- Application of physics to biological problems.
- Atomic spectroscopy in Astrophysical situations.

ADDRESS FOR COMMUNICATION

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References :

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2. Angom Dilip Kumar Singh,
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3. Prasanta K. Panigrahi,
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