

## FACULTY PROFILE



**Name :** Dr. S.SREE RANJANI  
**Designation :** Assistant Professor  
**Teaching Areas :** Mechanics, Electromagnetic theory

**Research Interests:** Nonlinear Dynamics , Applications of Quantum Mechanics (Quantum Hamilton-Jacobi formalism, Supersymmetric quantum mechanics), Mathematical Physics

**Education :** Ph. D, Hyderabad University, 2005.  
M. Sc. Hyderabad University, 1999.  
B. Sc. Osmania University, 1997.

### Professional Experience (12 years 6 months):

1. 2013 – till Date: Assistant Professor, FST, ICFAI Foundation for Higher Education.
2. 2010 –2013 : Principle Investigator of the Department of Science and Technology (DST) project at the School of Physics, University of Hyderabad, Hyderabad (Project Title: Bose-Einstein Condensate: Window to novel Physics).
3. 2009 – 2010 : Project fellow at Center for Advanced Studies, School of Physics, University of Hyderabad, Hyderabad.
4. 2007 – 2008 : CSIR Research Associate, School of Physics, University of Hyderabad, Hyderabad.
5. 2006 – 2007 : CSIR Research Associate, Indian Institute of Technology, Madras (IITM), Chennai.
6. 2005-2006 : Research Associate, Indian Institute of Technology, Madras (IITM), Chennai.

### Research /Selected Publications:

1. S. Sree Ranjani, R. Sandhya and A. K. Kapoor, Shape Invariant Rational Extensions And Potentials Related to Exceptional Polynomials, Int. J. Mod. Phys. A Vol. 30, No. 24 1550146, 2015, Preprint: arXiv: 1503:01394.
2. R. Sandhya, S. Sree Ranjani and A. K. Kapoor, Shape Invariant Potentials in Higher Dimensions, Ann. of Phys. 359 125, 2015. Preprint: arXiv: 1412:4244.
3. S. Sree Ranjani, P. K. Panigrahi, A. K. Kapoor, A. Khare and A. Gangopadhyay, Exceptional orthogonal polynomials, QHJ formalism and the SWKB quantization Condition, J. Phys. A: Math. Theor. 45, 055210 (2012), Preprint: arXiv:1009.1944.
4. S. Sree Ranjani, P. K. Panigrahi and A. K. Kapoor, Construction of localized atomic wave packets, J. Phys. A: Math. Theor. 43, 185205 (2010); Preprint: arXiv: 0806.1799.
5. S. Sree Ranjani, P. K. Panigrahi, A. K. Kapoor and A. Khare, An explicit realization of fractional statistics in one dimension, Ann. Phys. 324, 1176 (2009) ; Preprint: arXiv: 0812.4145.