Faculty Profile

Name :	**Dr. S. Sree Ranjani**
Designation :	Assistant Professor
Teaching Areas :	Mechanics, Electromagnetic theory, Electrical Sciences I and II, Measurement, Techniques.
Research Interests:	Nonlinear Dynamics, Applications of Quantum Mechanics (Quantum Hamilton-Jacobi formalism, Super symmetric quantum mechanics), Mathematical Physics
Education:	Ph. D, Hyderabad University, 2005.
	M. Sc. Hyderabad University, 1999.
	B. Sc. Osmania University, 1997.

Professional Experience (14 years):

1. Feb 2013 – till Date: Assistant Professor, FST, ICFAI Foundation for Higher Education**. Principal investigator for SERB funded project titled"Darboux transformations, exceptional orthogonal polynomials and exactly solvable models, EMR/2016/005002"**
2. 2010 – Feb 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, QHJ Route to multi-indexed exceptional Laguerre polynomials and rational potentials, Pramana - J. Phys. **93** 29, 2019.
2. 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. 241550146, 2015, Preprint: arXiv: 1503:01394.
3. R. Sandhya, S. Sree Ranjani and A. K. Kapoor, Shape Invariant Potentials in Higher Dimensions, Ann. of Phys. 359125, 2015. Preprint: arXiv: 1412:4244.
4. 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.
5. 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.
6. 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.