

# UNIVERSITY OF CALCUTTA

- 1. Full name of the faculty member : Dr. Suparna Sen
- 2. Designation : Assistant Professor
- 3. Specialization : Harmonic Analysis
- 4. Passport size photograph :



5. Contact information :

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## 6. Academic qualifications :

College/University from which the	Abbreviation of the degree
degree was obtained	
St. Xavier's College, University of	B.Sc. Math Hons.
Calcutta	
Indian Institute of Science, Bangalore	M.S. (part of Int. PhD.)
Indian Institute of Science, Bangalore	Ph.D.
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### 7. Positions held :

- Visiting Scientist, Statistics and Mathematics Unit, Indian Statistical Institute, Kolkata, India from January 1, 2011 to March 31, 2012.
- DST INSPIRE Faculty, Statistics and Mathematics Unit, Indian Statistical Institute, Kolkata, India from April 1, 2012 to August 31, 2016.
- 8. Research interest : Harmonic Analysis on Lie Groups
- **9. Project :** DST INSPIRE Faculty Award with research grant of Rs. 35 lakhs from April 1, 2012 to March 31, 2017 (5 years).

### **10. Select list of publications :**

- E. K. Narayanan; S. Sen, *Segal-Bargmann transform and Paley-Wiener Theorems on M*(2), Proc. Indian Acad. Sci. Math. Sci., 120 (2010) no. 2, 169-183.
- S. Sen, *Segal-Bargmann transform and Paley-Wiener theorems on motion groups,* Publ. Res. Inst. Math. Sci., 46 (2010) no. 3, 719-740.
- S. Sen, Segal-Bargmann transform and Paley-Wiener theorems on Heisenberg motion groups, Adv. Pure Appl. Math. 7 (2016) no. 1, 13-28.
- M. Bhowmik, S. Sen, *An Uncertainty Principle of Paley and Wiener on Euclidean motion group*, J. Fourier Anal. Appl. 23 (2017) no. 6, 1445-1464.
- M. Bhowmik, S. Sen, Uncertainty Principles of Ingham and Paley-Wiener on semisimple Lie groups, Israel J. Math, 225 (2018), no. 1, 193 -221.
- M. Bhowmik, S. K. Ray, S. Sen, *Around Theorems of Ingham-type regarding decay of Fourier transform on R^n, T^n and two step nilpotent Lie groups,* Bull. Sci. Math., 155 (2019), 33-73.
- S. Debnath, S. Sen, *Analogues of Beurling's theorem for some integral transforms,* Integral Transforms and Special Functions, *DOI:* 10.1080/10652469.2021.1979972
- S. Bagchi, A. Kumar, S. Sen, *Roe-Strichartz theorem on two step nilpotent Lie groups*, to be published in Math. Nachr.

### 11. Awards:

- CSIR Shyama Prasad Mukherjee Fellowship in Mathematics by Council for Scientific and Industrial Research, India in July 2007.
- Visiting Scientist Fellowship by Indian Statistical Institute Kolkata, India in December 2010.
- Post Doctoral Fellowship by National Board for Higher Mathematics, India in April 2011.
- DST INSPIRE Faculty Award by Department of Science and Technology, India in December 2011.

Suparna Sen

Signature of the faculty member Date : 02.10.2021