

## SwarnaJayanti Fellowships Scheme- 2020-21

### Shortlisted Candidates for Presentation before Subject Area Committee in

#### Physical Sciences

Date of Online/Virtual Presentation/ Meeting: **Thursday, 16th September, 2021**

**Time: 09.30 a.m.**

<b>S.No</b>	<b>Title of the Proposed Project Proposal/ Temporary File No.</b>	<b>Applicant Name and Institute</b>
1.	Imaging convection in the interior of the Sun  DST/SJF/PS/2021/114	Dr. Shravan Hanasoge Department of Astronomy and Astrophysics, Tata Institute of Fundamental Research, 1, Homi Bhabha Road, Colaba, Mumbai-400005
2.	Supernova remnants as the gateway to understand astrophysical turbulence and star formation  DST/SJF/PS/2021/115	Dr. Nirupam Roy Department of Physics, Indian Institute of Science, Bengaluru -560012
3.	Entanglement and quantum information in interacting and topological quantum systems  DST/SJF/PS/2021/118	Dr. Sumilan Banerjee Department of Physics, Indian Institute of Science, Bengaluru -560012
4.	Interplay of Symmetries and entanglement in gapless quantum matter  DST/SJF/PS/2021/120	Dr. Subhro Bhattacharjee ICTS- TIFR, Survey No. 151, Shivakote, Hesaraghatta Hobli, Bengaluru -560089
5.	Molecular-adducts and radicals for electronic doping  DST/SJF/PS/2021/132	Dr. Pabitra Kumar Nayak Tata Institute of Fundamental Research- Hyderabad, 36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad- 500046
6.	On the Crystallographic, Electronic, and Opto-Electronic Tunability of Metals and Metal Dichalcogenides in 'Water-in-Salt' Electrolytes for High Performance Energy Systems  DST/SJF/PS/2021/141	Dr. Narayanan T N Tata Institute of Fundamental Research- Hyderabad, 36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad- 500046
7.	Scattering Amplitudes and Flat Space Holography  DST/SJF/PS/2021/147	Dr. Shamik Banerjee Institute of Physics Sachivalaya Marg, Bhubaneswar - 751005
8.	Unravelling the microphysics of warm clouds: The collision-coalescence conundrum  DST/SJF/PS/2021/151	Dr. Samriddhi Sankar Ray ICTS- TIFR, Survey No. 151, Shivakote, Hesaraghatta Hobli, Bengaluru -560089

9.	Moiré magnets and topological hierarchy DST/SJF/PS/2021/153	Dr. Tanmoy Das Department of Physics, Indian Institute of Science, Bengaluru -560012
10.	Cluster dynamics in self-organized biological systems DST/SJF/PS/2021/155	Dr. Vishwesh Guttal Centre for Ecological Sciences Indian Institute of Science, Bengaluru -560012
11.	Non-equilibrium dynamics in quantum matter: from spin systems to lattice gauge theories DST/SJF/PS/2021/159	Dr. Arnab Sen School of Physical Sciences, Indian Association for the Cultivation of Science , Jadavpur, Kolkata- 700032
12.	Exploring spin-manipulated charge transport in disordered/asymmetric hybrid 2D materials for green energy generation and storage DST/SJF/PS/2021/160	Dr. Praveen Kumar School of Materials Science, Indian Association for the Cultivation of Science , Jadavpur, Kolkata- 700032
13.	Hydrodynamics of swimming spermatozoa cells DST/SJF/PS/2021/168	Dr. Sumesh P. Thampi Department of Chemical Engineering, Indian Institute of Technology-Madras, Chennai-600036