School of Mathematics
Thapar Institute of Engineering and Technology
(Deemed to be University as per UGC act 1956)
Thapar Technology Campus, P.B. No. 32, Bhadson Road Patiala-147004, India

Sanction Number: SRG/2019/000512	Dated: 1 February, 2020

<u>Advertisement for</u>: **JRF position** under **DST-SERB** research grant awarded to **Dr. Amrik Sen**

<u>Project title</u>**: Construction of a Reduced Model for Investigating Dispersion of Pollutants by Atmospheric Wave Turbulence in the Atmospheric Boundary Layer**

Applications are invited from prospective candidates who are **NET** or **GATE** qualified under the aforementioned sponsored project as per following details.

Position	**JRF (Junior Research Fellow)**, the candidate will be automatically enrolled in the PhD program of Mathematics
Number of open positions under this project	**ONE**
Principal Investigator (PI)	**Dr. Amrik Sen**, Assistant Professor, School of Mathematics, Thapar Institute. Email: **amriksen@thapar.edu** Web: **https://www.amriksen.com**
Tenure of project	2 years (extendable up to one additional year)
Job Description	The project will serve as the basis of the fellow's doctoral thesis and will give him/her an opportunity to work on a state of the art supercomputer to solve real world problems in climate and weather modeling of great relevance especially to the people of North India. Typical tasks will include developing and using numerical code to solve partial differential equations. The development of the code for the reduced model as well as performing multiple simulation runs on a parallel multiprocessor machine will be performed by the PhD scholar under the supervision of the PI. The scholar will also participate in the theoretical development of the reduced model and present the results of the work in national and international conferences as well as participate in the writing of research papers that will be published in top tier journals. Training obtained during the project has high prospects in securing a job in the industry and academia.
Essential qualifications	**First division in MSc (Mathematics or Physics or Computer Science)** and **NET** or **GATE qualified**

Pre-requisites	At least advanced undergraduate level course in **numerical techniques** to solve **ordinary** or **partial differential equations** or **computational methods in physics**, **basic linear algebra**, **programming experience in C** or equivalent at the undergraduate level.
Age	28 years (max at the time of applying, relaxation of 5 years is applicable to women candidates and those belonging to ST/SC/OBC/differently abled)
Fellowship award	Rs.33,480 p.m. (HRA included) + institute medical benefits
Deadline for application	**March 22, 2020 by 5 pm**
Mode of application	Please send your CV (resume) along with scanned copies of NET or GATE qualification certificates, BSc, MSc, and school graduation degrees via **email only** to **amriksen@thapar.edu**

Interview and selection:

Shortlisted candidates will be informed of the date of interview by e-mail only. Meeting the minimum qualification requirements do not guarantee an invitation to the interview. Candidates will be short listed based on merit and as per the requirement of the project. All candidates should make their own arrangements for travel to and from Patiala and for their stay. No TA/DA will be paid to attend the interview.

Interview is likely to be held on last week of March, 2020.

Dr. Amrik Sen
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