

Bhuvnesh Brawar

RESEARCH SCHOLAR,
DEPARTMENT OF ASTRONOMY, ASTROPHYSICS
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EDUCATION

Indian Institute of Technology, Indore, Madhya Pradesh, India
PhD, Ionosphere Physics & Space Weather *Aug' 2021 - Present*
Supervisor Prof. Abhirup Datta
CGPA: 7.7/10

Central University of Rajasthan, Kishangarh, Rajasthan, India
Master of Science, Physics *Jul'2017 - May'2019*
CGPA: 6.56/10

Baby Happy Modern PG College, Hanumangarh Rajasthan, India,
(Maharaja Ganga Singh University, Bikaner, Rajasthan, India)
Bachelor of Science *Jul'2014 - Jun'2017*
Percentage: 71.41%

RESEARCH INTERESTS

My research interest lies in understanding the physical process happening in the ionosphere and the effect of extreme or quiet space weather conditions on ionosphere and satellite-based navigation systems.

MASTERS' THESIS/ RESEARCH PROJECT

Resource Budget Model: Synchronization in fruit bearing map
Supervisor : Prof. Manish Dev Shrimali
School of Physical Science, CURaj *Jan '19 - Apr '19*

In this report, I reviewed the Discrete Dynamical System, One Dimensional Maps, Resource Budget Model, Synchronization in plants in photosynthate production and possible strategies to stabilize annual fruit yield. Here in the project work, I simulated the Resource Budget Model (RBM) for a single plant as well as two coupled plants. It would be helpful to find an easier way to get controlled fruit yield rather than the conventional methods like thinning and pruning. Those methods are more time-consuming and need more laborious work, and most important one should have great experience to make proper decisions. Using the grafting technique, plants can be directly coupled. It enhances the fruit production.

SKILLS

Programming Languages: MATLAB, Python(numpy, pandas, matplotlib, basemap etc.)
Analytical Skills: MS-Excel (office), Statistics
Word Process: MS-Word (office), L^AT_EX
Operating System: Windows, Ubuntu (Linux)
File Type: CSV, TSV, MAT, HDF5, RINEX, TXT, CDF
Instrument: GNSS Receivers (Septentrio, u-blox), NavIC Receiver(Accord), VLF-ULF Receiver

AWARDS & ACHIEVEMENTS

- GATE-2021
- GATE-2020
- Joint CSIR-UGC-NET-LS-Dec-2019 (with NFOBC)

- *Joint CSIR-UGC-NET-JRF-Jun-2020*
- *JEST-2020*
- *INSPIRE Scholarship for Higher Education-2014*

LANGUAGE *Hindi, English, Rajasthani, Punjabi*

HOBBIES *Playing Badminton, Listening Music, Trekking, Solving Sudoku*

TEACHING ASSISTANT

- *AA 201: An Introduction to Astronomy (Autumn 2022) @IITIndore*
- *AA 652: Astro Lab II (Spring 2023) @IITIndore*
- *AA 403/603: Space Engineering System (Autumn 2023) @IITIndore*

EXPERIENCES

- *URSI-RCRS 2022: Hall Management*
- *ASI 2023: Outreach Activities*
- *IISF 2022: Outreach and Popularization Activities*
- *IITI Dinning Committee 2022: Inventory and Inspection*
- *IITI HORC 2023-24: Cultural Secretary, HJB Hostel*
