

Shristi Astronomy



OFFICE OF ASTRONOMY
FOR DEVELOPMENT

Astronomy Data, Virtual Observatory and Education

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**When you ask a teacher
how virtual learning is
going so far.**

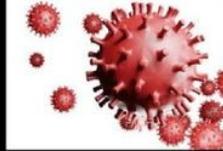
**BORED
TEACHERS**



1 hour here is 7 years on earth

ONLINE ASTRONOMY CLASSES

FOR SCIENCE TEACHERS AND
ASTRONOMY ENTHUSIASTS
18-23 MAY 2020
4.30 PM TO 6.00 PM IST



BY
PRIYA HASAN
S N HASAN

Topics :

Essentials of Astronomy
The Solar System
The Life and Death of Stars
The World of Galaxies
Cosmology
Eyes to the Skies: Telescopes
Hands-on Demos: Telescope Making, spectroscopes
Astronomy Olympiads, Careers in Astronomy
Feedback and Discussion

Organised by JVV, Telangana

*Please register your name on or before 18-05-2020 at 5 pm to *Sri M. Venkatesh, * State Secretary, Jvv Telangana on his WhatsApp +91 99127 82075*

- 1. Name*
- 2. Profession*
- 3. Designation*
- 4. Working Place & District*
- 5. Mobile / WhatsApp number*
- 6. E mail ID*



Joy of Learning: Physics @ Home

4-5:30 pm, 15-20 June 2020

Areas to be covered:

- **Newton's Laws**
- **Gravity**
- **Simple Machines**
- **Pressure**
- **Optics**
- **Electricity & Magnetism**

Maximum 200 students:

Registration:
Online mode... Click the following link
<https://forms.gle/yiMJXqbGrC53hQDW7>

Selection on first come, first (register) basis.

Every 'Registered Student' should attend every class on all 6 days and complete timings. Those who submitted feedback and Quiz will get Certificate.

Resource Persons:
Dr Priya Hasan
Prof S N Hasan
Maulana Azad National Urdu University, Hyderabad, India



Results of Extraordinary call for COVID-19 related proposals

In May 2020, the IAU Office of Astronomy for Development issued an [Extraordinary Call for Proposals](#) that could use astronomy in any form to help mitigate some of the impacts caused by COVID-19. Together with the African Astronomical Society and African Planetarium Association, more than 800,000 ZAR (about 40,000 Euros) in grants have been awarded to 43 projects around the world that use various aspects of astronomy and the astro community to help communities suffering the negative impacts of COVID-19.

Summaries of projects are listed below (in alphabetical order). For more information on any of the projects, write to [info \(at\) astro4dev.org](mailto:info@astro4dev.org).

Astronomy from Archival Data

India and all over the world

The project will train students to use the high-quality astronomy data from various facilities. Participants will be shown step-by-step techniques of accessing and analysing astronomy data from the Internet, introduced to virtual observatory tools and programming techniques, and supported to formulate and develop projects. The training will include special sessions on report writing, publishing and presenting in scientific journals. More info at: <https://shristiastro.com/astronomy-from-archival-data/>



shristi astronomy

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Astronomy From Archival Data

An IAU-OAD Project

915 RESPONSES

INDIA, PAKISTAN, BANGLADESH, SRILANKA, NEPAL, GERMANY, ITALY, UK, USA, SA, NIGERIA, BOTSWANA, NAMIBIA, GHANA, COLUMBIA, BRAZIL, MEXICO, PHILIPENES, INDONESIA, THAILAND, MALAYSIA, CHINA, JAPAN...

23..COUNTRIES

SOMETHING THAT STUDENTS WANT!!!

OUR TEAM



Dr Priya Hasan

Asst Professor

(Astronomy /Physics)

Prof S N Hasan

Professor

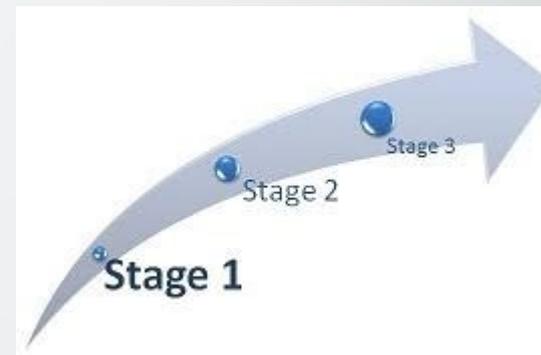
(Mathematics/Astronomy)

Maulana Azad National Urdu University, Hyderabad, India

MODUS OPERANDI

- Virtual teaching has been there for a while..now a serious option to consider
- Website designing and maintenance
- Social Media
- Contact: Telegram, Email
- Feedback: Homework, Quizzes, Polls
- Variety of Speakers: Mark Taylor, Luisa Rebull, Bruno Merin, Deborah Baines, Tim Hamilton, Ajit Kembhavi, Avinash Deshpande, Kaustubh Waghmare, ...

Three phases



The first phase (August - November): Live zoom sessions, Saturdays and Sundays, 10-11:30 am IST, lectures and interactive hands-on sessions, Variety of speakers from India and abroad

All the sessions were recorded and posted online. We now have 80 video recordings online at:

<https://www.youtube.com/playlist?list=PLGf1ijrdazzELSYHF7RzQzTNbgihyW8hw>

Reading material, quizzes, data sources, analysis techniques, etc available on our website (<https://shristiaastro.com/astronomy-from-archival-data/>)

The second phase was when students selected projects and interacted with mentors.

The third phase (Feb 2021) was when students presented their projects.

In terms of data analysis and VO Tools, we covered Python, Astropy, TopCat, Aladin, EsaSky, R, Machine Learning and Big Data. The data used was Gaia, SDSS, HST, Kepler, etc. We introduced students to high-quality archival astronomy data from various facilities, ground and space-based.

1000 students from 25 countries all over the world.

an incredible collection of learning material



sessions

links to videos and slides



reading material

reference articles and material to be downloaded



homework and quizzes

One quiz per week. One attempt only. Marks displayed.



software

links to software to be installed



syllabus



polls

Your valuable feedback

CAVEATS

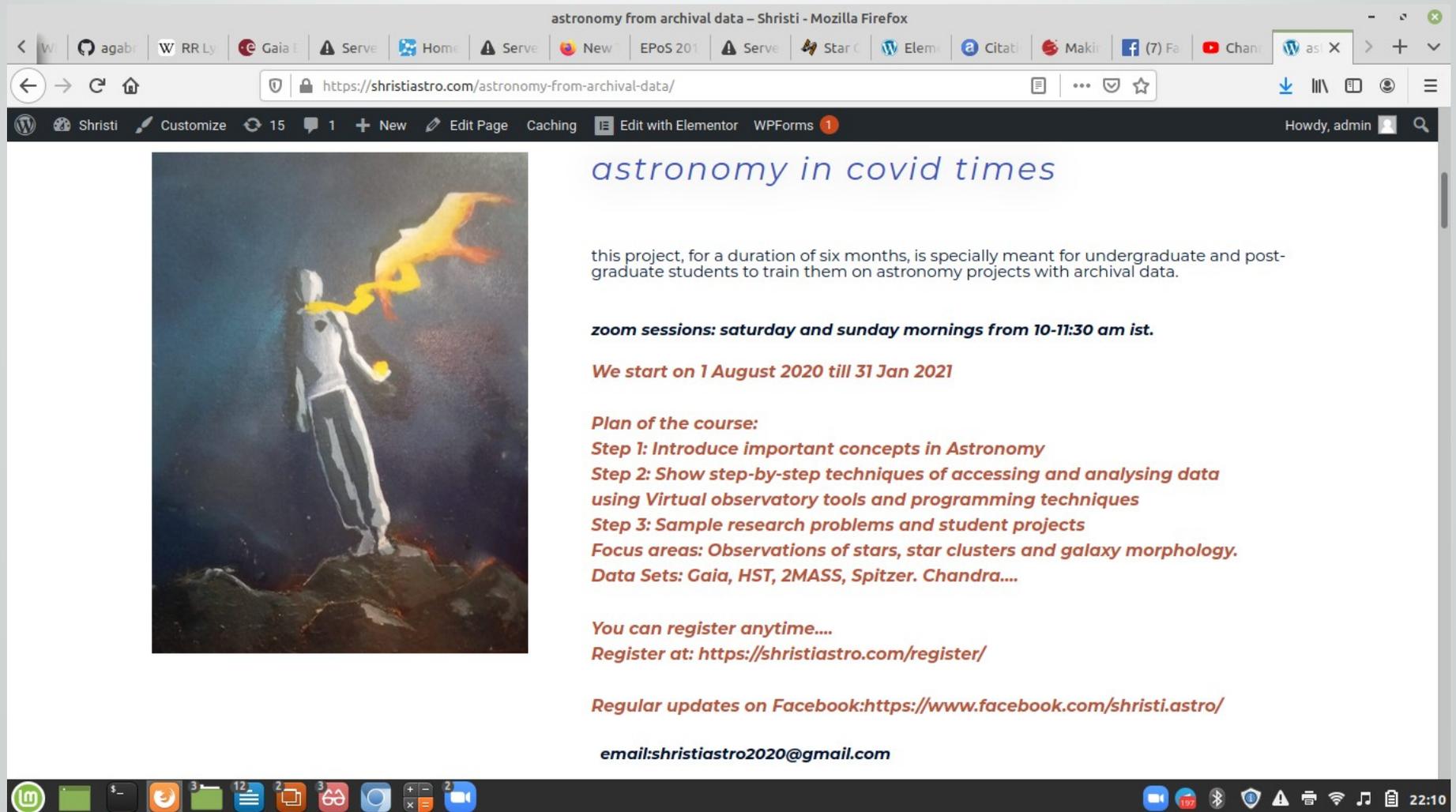
- Planning events
- Dates: Saturday/Sunday mornings
- Recordings available so that students can join later as well as attend at their convenience
- Enabling subtitles
- Not all who register, attend!
- Variety of speakers: research scholars, faculty & participants
- Many resource persons happy to share their resources
- Level?
- Network issues, power...

YOUTUBE

The screenshot shows the YouTube channel page for Priya Hasan. The channel has 628 subscribers. The page features a navigation menu on the left with options like Home, Explore, Subscriptions, Library, History, Your videos, Watch later, Thermal Lab, and Show more. The main content area displays the channel name, subscriber count, and buttons for 'CUSTOMIZE CHANNEL' and 'MANAGE VIDEOS'. Below this, there are tabs for HOME, VIDEOS, PLAYLISTS, CHANNELS, DISCUSSION, and ABOUT. The 'Uploads' section is visible, showing a 'PLAY ALL' button and a row of video thumbnails, including one with a spectrum diagram and another with mathematical equations.

The screenshot shows the YouTube Studio analytics dashboard for Priya Hasan. The dashboard is titled 'Channel analytics' and shows data for the period 'Apr 22 - May 19, 2021' over the 'Last 28 days'. The main headline states: 'Your channel got 2,167 views in the last 28 days'. Below this, there are three summary cards: Views (2.2K, 'About the same as usual'), Watch time (hours) (200.2, 'About the same as usual'), and Subscribers (+50, '11 more than usual'). A line graph shows the view trend over time, with a callout for 'Wed, May 19, 2021' showing 65 views. On the right, there is a 'Realtime' section showing '628 Subscribers' and '159 Views - Last 48 hours' with a bar chart. The left sidebar contains navigation options like Dashboard, Content, Playlists, Analytics (selected), Comments, Settings, and Send feedback.

A TOUR OF OUR WEBSITE.... HTTPS://SHRISTIASTRO.COM/



astronomy from archival data – Shristi - Mozilla Firefox

https://shristiastro.com/astronomy-from-archival-data/

Shristi Customize 15 1 + New Edit Page Caching Edit with Elementor WPForms 1 Howdy, admin



astronomy in covid times

this project, for a duration of six months, is specially meant for undergraduate and post-graduate students to train them on astronomy projects with archival data.

zoom sessions: saturday and sunday mornings from 10-11:30 am ist.

We start on 1 August 2020 till 31 Jan 2021

Plan of the course:

- Step 1: Introduce important concepts in Astronomy**
- Step 2: Show step-by-step techniques of accessing and analysing data using Virtual observatory tools and programming techniques**
- Step 3: Sample research problems and student projects**

Focus areas: Observations of stars, star clusters and galaxy morphology.

Data Sets: Gaia, HST, 2MASS, Spitzer. Chandra....

You can register anytime....

Register at: <https://shristiastro.com/register/>

Regular updates on Facebook: <https://www.facebook.com/shristi.astro/>

email: shristiastro2020@gmail.com

22:10

TOOLS, SCIENCE CASES

Python, Astropy, TopCat

Aladin, EsaSky, R

Machine Learning. Big Data

Gaia Data: ADQL, EsaSky, TopCat

SDSS: Globular Clusters (HR, Distance...)

Kepler Data: Analysis, Exoplanet parameters

Magnetars

Pulsar Data

Galaxy Morphology





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CATEGORY ARCHIVES: ASTRO SPRINT

2021, ASTRO SPRINT, CENTRAL AND SOUTH ASIA, GLOBAL

Overview: Astro Sprint

POSTED ON JANUARY 5, 2021 BY MASTERUSER



RECENT POSTS



Schedule and zoom link details...

ENTERPRISE

26th, 27th & 28th March
Online Zoom Sessions.

Warp Drive your way to
Research in Astronomy!

Enter



Enterprise was a three-day school held from 26-28 March 2021. The complete set of 19 lectures are at:

<https://www.youtube.com/playlist?list=PLGf1ijrdazzEiPlr4TCRzYLkDDDdHw7BOS>

	26 March	27 March	28 March
9:30-10:30	The N-body Problem and it's applications in Astronomy (SNH)	Doing Science With the Chandra Archive (JM)	Hands-on session on The N-body Problem and it's applications in Astronomy (SNH)
10:30-11:30	The blips and hiccups of Radio Pulsars(Sushan K)	Combining Gaia data with GALAH, SDSS and other datasets(PH)	The blips and hiccups of Radio Pulsars (Sushan K)
11:30-12:00			
12:00-13:00	A Comparison of Gaia DR2 and EDR3 with Case Studies (PH)	Expanding universe and Newtonian Cosmology (PDG)	Early universe, dark matter and dark energy (PDG)
13:00-14:00			
14:00-15:00	Topics in Statistics-1 (TDS)	Topics in Statistics-2 (TDS)	Topics in Statistics-3 (TDS)
15:00-16:00	Crossmatching with TOPCAT (MT)	An introduction to N-body simulations of disk galaxies. (SK)	A hands-on session on analyzing the galaxy simulation data products. (SK)
16:00-16:15			
16:15-17:15	The Four Cs-1 (AD)	The Four Cs-2 (AD)	The Four Cs-3 (AD)
17:15-18:15	Active Galaxy spectroscopy, using spectra from the Sloan database (TH)		



Discovery is planned in the month of July, when students may be free from classes, and we plan a Five-Day Session where participants will be shown step-by-step techniques of accessing and analysing astronomy data in various wavelengths and address some sample problems. Finally in the month of October/November, in the third session Astro-Sprint of 5-6 days, students can plan and formulate project ideas of varying complexity, which we shall mentor. The culmination of this will be presentations of student projects. special sessions on Report Writing, publishing and presenting in scientific journals. This plays a very important role in research methodology. More details at our website: <https://www.astrosprint2021.com/>

Depending on the pandemic situation these meetings will be physical or virtual. We will anyway do them in online mode too with a live webcast for foreign participants.

THE WAY FORWARD.....

Coordinated efforts in Education with VO

Intro2Astro Research

Global Sky Partners LCO

Access to resource persons and resources

Webpage....web resources

Workshops, activities

Possible funding

