

Physics Online Seminar Series

“An introduction to extragalactic astronomy: Clues to our origins”



Resource Person:

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Inter-University Centre for Astronomy
and Astrophysics (IUCAA), Pune



Date: 23/08/2024

Time: 10:45 am

Google Meet Link:

<https://meet.google.com/pen-rmvd-ucf>

Organised By:

DEPARTMENT OF PHYSICS

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GPS Map Camera

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Lat 26.202965°

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23/08/24 10:54 AM GMT +05:30



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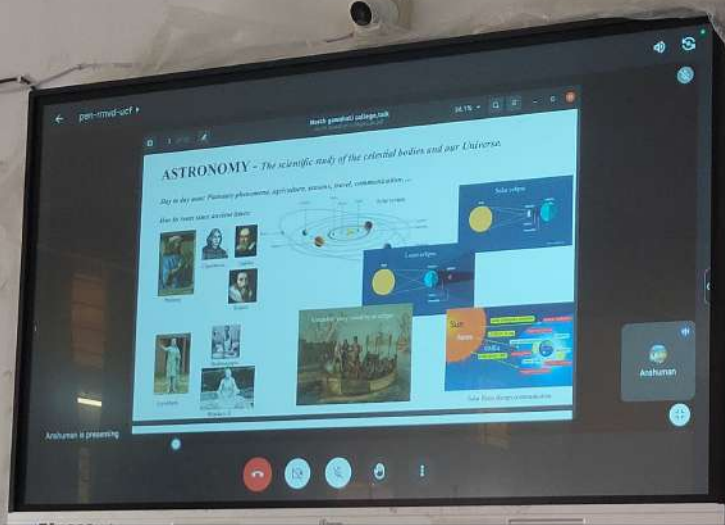
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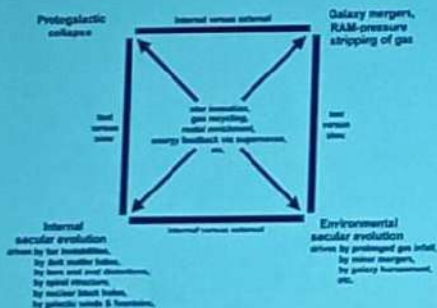
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HOW DO GALAXIES EVOLVE & HOW DO WE TRACK IT?



Lot of activity: Stars forming and dying, interaction, active black holes; all these shape the evolution of galaxies.



We look into numerous galaxies of similar types at different distances!

For far away objects we are looking into the past!

*How do we track these changes?
Even light from one end of the Milky Way takes which human lives cannot measure! ($c \sim 3 \times 10^8$ metre/sec)*

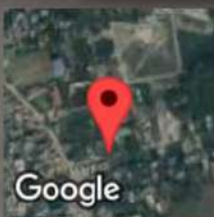


We will not be there for 5 billion years to witness the merging to Milky Way and Andromeda!

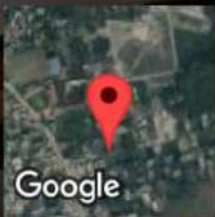
Another way: Use of computer programs, input established laws of physics and simulate!

Anshuman

Anshuman is presenting

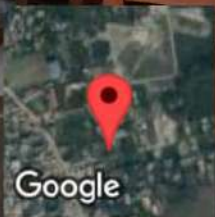


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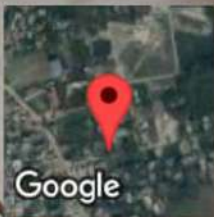


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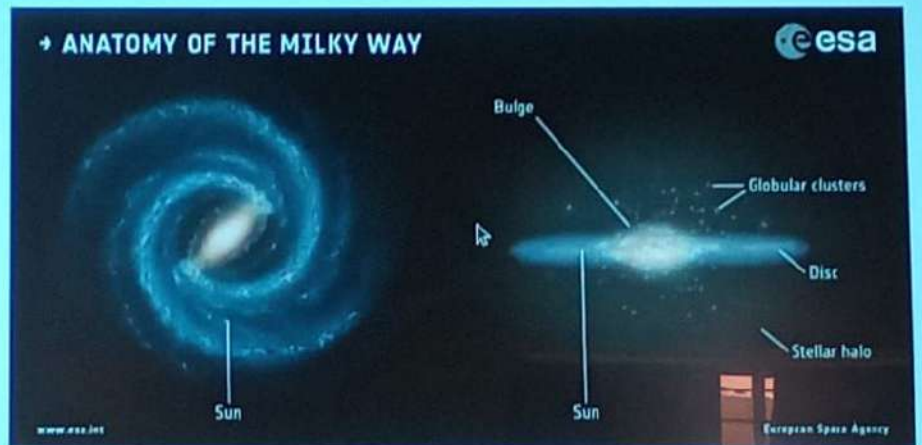
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TYPICAL COMPONENTS IN A GALAXY

Bulge
+
Disk
+
Bar
+
Spiral arms
+
Halo

→ ANATOMY OF THE MILKY WAY



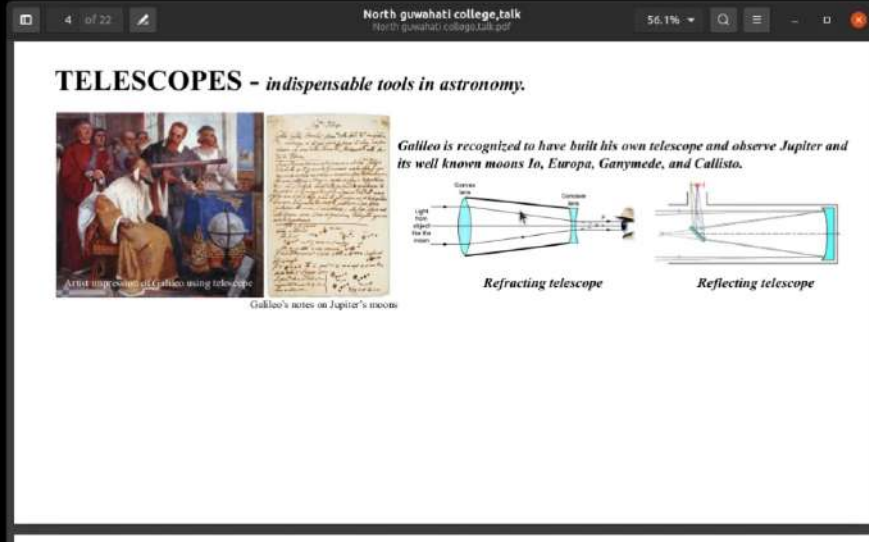
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Dhr...



Try You to speak? Turn on your mic Raj kh... 14 others





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Achyut



You



Dhr11others





13 of 22

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CONTRIBUTE TO THE STUDY OF GALAXIES

<https://www.zooniverse.org/projects/zookeeper/galaxy-zoo/>

TASK

TUTORIAL

Is the galaxy simply smooth and rounded, with no sign of a disk?

Smooth

Features or Disk

Star or Artifact

NEED SOME HELP WITH THIS TASK?

Get a Hint

Pass

Anshuman is presenting



Anshuman



Dhrubajit



You



Achyut

11 others