

Monthly Digital Newsletter

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Must Read for you

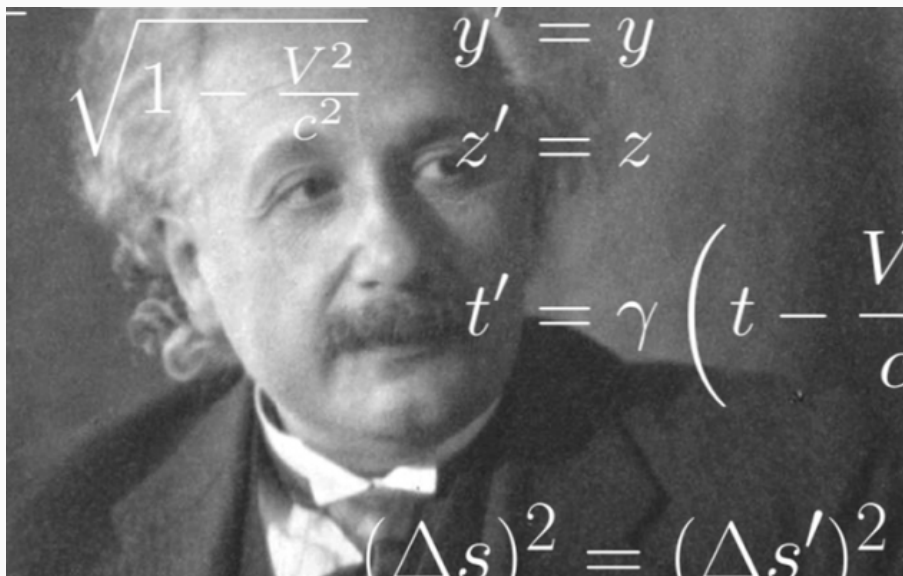
Essence of The Special Theory of Relativity

BY PALAK SINGH

I'll try to convince you that special relativity is fairly intuitive...

Before reading the whole thing, I want you to do a little experiment. I'm guessing you are in a perfectly well-lit room, or rather since you are reading it on a screen your pupils might still be contracted so it'll work. Make sure it's nighttime and the windows or blinds are shut, we don't want any light sources (dimmiest place possible).

The minute you shut all the light sources off (even the device you're reading this on), try to notice the difference between your eyes closed and open. Do it now.



READ MORE AT: [Essence of The Special Theory of Relativity](#).

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Must Read for you
Essence of The Special Theory of Relativity

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Must Read for you

Space Shuttle that exploded and shook the world!

BY RAJWARDHAN RAHUL DESHMUKH



It was the beginning of the 20th century – December 17, 1903, to be precise. Wilbur and Orville Wright (AKA the Wright brothers) took their first-ever flight. No man had ever flown in the air before this date. Exactly 66 years later, a man stepped foot on the moon. Blown away? Me too.

Over the last century, Mankind has seen progress like never before. We should count ourselves lucky to be born into this era of a technological boom. If at the beginning of the 20th century (or even in the mid-20th century for that matter), you had told someone that in some years, a man will step on the moon – you would have been dismissed as silly. Well, who's laughing now?

READ MORE AT: [Space Shuttle that exploded and shook the world!](#)

**"You must enjoy
the journey.
Because, whether
you get there or
not, you must have
fun on the way"**

-Kalpana Chawla



SHE's in STEM

Part 3



In SHEs in STEM third edition, we are going to be learning about two more eminent personalities who have paved the path for SHEs in STEM.

1. Dr. Roberta Bondar, Canada's first female astronaut and the world's first neurologist in space
2. Augusta Ada King, the first conceptual programmer for Charles's Babbage Analytical engine

READ ABOUT THEM AT: [SHEs in STEM \(Part 3\)](#)

Also read our previous article series from links below

Part 2

Part 1



READ MORE AT: [SHEs in STEM \(Part 2\)](#)



READ MORE AT: [SHEs in STEM \(Part 1\)](#)

FEATURED BLOGS OF THE MONTH

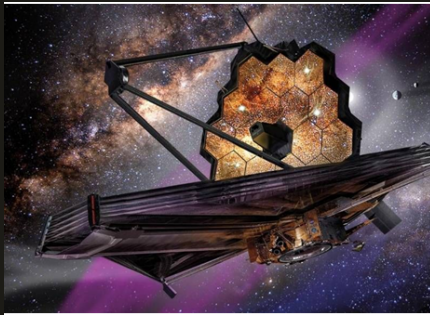
SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4 A Swarm of Black Holes at Our Galaxy	5	6	7
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THE NEWS BULLETIN

1

James Webb Space Telescope gearing up for its launch this year

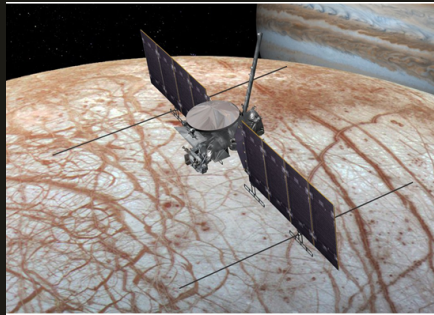
James Webb Space Telescope aka 'NASA's new eye in the cosmos' has completed its final set of tests and is currently being prepped for shipment to the launchpad for its launch later this year. This is the largest and the most powerful space telescope ever built is a cosmic time machine that will peer into the events that took place many millions of years ago and will hunt for exoplanets having potential life better than ever.



2

Spacecraft to Europa gets its own vehicle!

For the first time the icy moon Europa, an ocean world orbiting Jupiter will be visited by a orbiter called Europa clipper. NASA had recently selected SpaceX's Falcon Heavy rocket to launch this first of its kind astrobiological mission to explore another planetary body containing an ocean other than Earth in our Solar System. The launch is scheduled for October 2024. Studying this enigmatic world has implications for finding extraterrestrial life that might be lurking inside the ocean depths of Europa!



3

First sample collection failure for Perseverance Rover

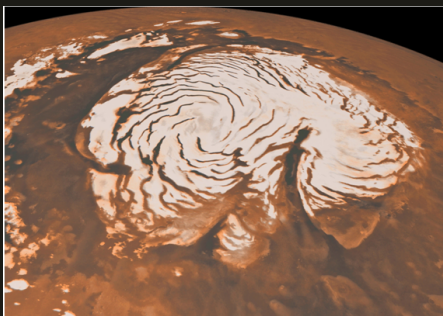
On its first endeavour to collect the first sample from an area in the Jezero Crater, the rover failed to do so. Investigators mention that the process is fully autonomous and the problem was probably due to unexpected rock and regolith properties at the site instead of it being a technical or an operational problem. The WATSON instrument is currently clicking detailed images of the borehole made after drilling which will help the team understand what actually went wrong.



4

Do Martian polar lakes have clays instead of water?

Multiple Mars orbiters like the Mars Express Orbiter have predicted the presence of subsurface liquid water lakes under the polar caps on Mars. However recently, researchers have reanalyzed the radar observations obtained from these orbiters and have now concluded that there is no water there and instead smectite, a type of clay common in Mars is present, which gave out the same signals as water did that misled scientists earlier.



5

Water vapour detected in Ganymede?

A team of researchers has detected water vapour in the thin atmosphere of Jupiter's ice-laden moon, Ganymede using Hubble telescope data. However, a reanalysis of the 2018 data indicated the presence of water vapour instead, which could be explained by the sublimation of ice around the equator during noon where it became sufficiently warm.



6

Class of exoplanets with a potential to harbour life hiding in plain sight?

A recent study on a larger group of exoplanets- hot planets bigger and unlike Earth with hydrogen atmospheres and oceans that were discovered earlier has suddenly shown the possibility of hosting life in its oceans. These exoplanets called hycean planets were declared to be inhospitable because of the immense pressure generated by their hydrogen atmospheres.



All the news and images are derived from internet sources

A PLATFORM TO GET YOUR SPACE BLOG PUBLISHED
EDGE OF SPACE WELCOMES YOU FOR

GUEST BLOGS

Mail us your blogs on Space Science,
Astrophysics, and Cosmology as a MS Word file
to eos@sserd.org and the subject of the mail as
"Guest Post: title of the blog"

BLOG SPECIFICATIONS FOR SUBMISSION

Max. word limit: 1000.

Your article must be 100% original writing
It must be free from grammatical errors

List all references at the end of the blog.
Make sure that it is factually correct content.
The article must be non-plagiarized

Max 4 pictures are allowed (along with image source and URL)

FROM SSERD

OUTREACH PROGRAM 2021

Society for Space Education, Research and Development (SSERD) is an independent, non-profit organization dedicated to making space education accessible to everyone globally since 2016. It has a reach of 50,000+ students from more than 50+ countries through various space programs.

SSERD's outreach program, in a true sense, is an example of connecting space enthusiasts throughout the world, giving them a chance to acknowledge the beauty of space, science, and technology, thereby unravelling some of the mysterious questions that still lie out there.

So this year, Grab the opportunity to be a part of 1 Million space enthusiasts exploring the Space along with SSERD for non-stop 14 days during the SSERD Outreach 2021 Program. The Program includes celebrating World Space Week for seven days [October 4th - 10th] and Outreach activities [October 11-17th] for the next seven days for school students, undergraduates, teachers, and the common public globally.

**CLICK HERE TO KNOW
MORE AND REGISTER**



FROM SSERD

PHILASTRA: THE SPACE CLUB

PhilAstra is a space Club for students to learn and discuss anything and everything related to Space Science and Technology.

Space Enthusiasts studying between Grade 1 and Grade 12 as well as students of Asteroid Search Campaign and Junior Space Scientist program can become a member of the club.

Mode of registration is through invite only. Philastra is an elite space club by SSERD.

The club organizes monthly interactions (twice) to learn about the recent events and developments in the field of Space. Members of the club also gets to interact with Scientists, Engineers and Science Educators.

The club helps in building networking with like minded space lovers and working on mini projects. Special sessions, workshops and exclusive annual night sky gazing camps will be organized as a part of the club activities.

Philastrians get discounts on Space Courses and merchandises by Genex Space. Philastra helps boost personal skills through internal student seminars and competitions. The club also provides guidance to take part in national and international competitions organized by various space agencies.

STAY TUNED TO KNOW MORE



INTERNSHIP AND PROJECT DIVISION

The goal of this internship is to help students to work on space-related projects! You will receive the best of training and guidance from SSERD as well as other pioneers in the field all to your home and completely online. You will also earn an e-certificate after the completion of the internship.

TOPICS:

1. Propulsion System
2. Astronomy and Astrophysics
3. Satellites
4. Space Settlement
5. Space Mission Design
6. Space Robotics
7. SSERD Operations

BENEFITS:

1. Training
2. SSERD official membership
3. Career guidance
4. Access to professionals
5. Scholarships will be provided for those who can't afford

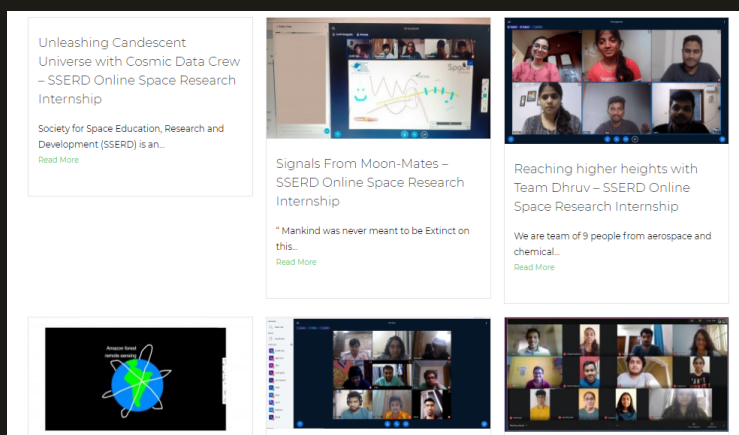
TRAINING ON:

1. How to do the research
2. How to look for the correct information
3. How to make the best resume
4. Selection of universities
5. Project Specific Trainings

Application is open for any students pursuing undergraduate and postgraduate programs.

Application Process:

1. Fill the application form
2. Wait for interview notification
3. Issue of topics
4. Commencement of Internship



Visit [SSERD Internships](https://sserd.org/interhips) to know more

A monthly digital newsletter by Edge of Space.
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