

IS SKY THE LIMIT?



WORK IN PROGRESS

JUST LIKE US

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Just Ben Things

FOR PRIVATE CIRCULATION AMONG THE MEMBERS OF THE CLUB.

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Work in Progress



Just like Us

Trouble in Paradise

In March-April last year, owing to the final exams of the 10th and 12th standard Bens, close to 6 meetings were cancelled in a span of 2 months.

Following which, in May, a few more meetings were cancelled as quite a few Bens were out of town. This year, while the meetings in March and April happened quite smoothly with just one cancellation, the month of May brings alarming news.

Post the intraclub competitions, the number of possible attendees at the weekly meetings has gone down from almost 18 to 11. And inevitably, when more than three of the 11 are unavailable, there is no quorum to conduct a meeting. And this is exactly what has been happening for the last one month.

There was a point last year when meetings were cancelled if one or two members from the governing board were not available, despite there being quorum. Well, looks like we're back to square one.

There has been only one official meeting in the last five weeks and the one that happened, was also without a literary session.

Is this due to a lack of efforts from the governing board, or the casual attitude of the young blood is something that need introspection.

Having said that, the fact of the matter is that the club is in dire need of newer, dedicated members, or at least a come back from the existing members.

Upon speaking to the governing

board, we learn that some efforts have begun in this regard. The General Body has identified 3 intermediate and degree colleges with a considerable number of students from Malkajgiri, and has drawn out a plan of action for each, based on their knowledge of what will work out best. As the implementation of this plan will take time due to the summer vacation, the members, who have all been allotted to one of the identified colleges, are using this time to work out the best strategy by talking to students and faculty members.

The Governing Board has crossed their fingers in hope that these plans work out and bring in the dedicated members that we desperately need.

Back to square one?

The year 2018 had barely 32 meetings held and barring one all other meetings were attended by the then EVP Ben Krishnaveni. In fact, she was the driving force in ensuring the Sunday meetings were held by quite literally calling up members and garner quorum. With Ben Krishnaveni becoming President in 2019, the onus continued on her to ensure the meetings were held as per schedule. In the first week of April, when the President was away on some personal work and that Sunday the meeting didn't happen and again on April 28th, she was on vacation (out of Hyderabad) and the Sunday meeting, as expected didn't

materialise. Its to her credit that the regularity of the club has been maintained over the past year and half. However, it is also to her discredit that the other members of the Governing board, both in 2018 and now in 2019, haven't been able to take up the onus of running the club, that too in the summer holidays. Why is it the club is dependent on one person? Is "No KV - No meeting" the norm? Can the others - the AVP, EVP, GS and Jt Secy put up their hands and show some spine?



Congratulations and Celebrations!!

If March is known for exams, May is known for results. The Board exam results for Classes 10, 11 and 12 were declared this month, and quite a few of our members have come out with flying colours. Bens Sathwika and Harshitha, wrote their 10th Boards, Bens Praneeth, Raj and Vybhav the 11th, and Ben Srujana 12th. We are happy to announce that all of them scored really well, and congratulate them on behalf of the entire Bens Fraternity.



A Questioning Mind



Astronomy, if I remember correctly, was the first subject, that was not in the school curriculum, that I was fascinated with.

Like all kids, I had a very inquisitive mind and would feast on the myriad facts of Astronomy, from pulsars & supernovas of the deep galaxies to the Earth & the Moon in the solar system, from the twisted knowledge of ancient Indians to the barely comprehensible theories of Einstein & Hawking.

But more than the inquisitive mind, it was the questioning mind that I seemed to possess which made astronomy a great pleasure. Little facts that I came across, would reveal more insights to the questions that cropped up in my mind.

It goes without saying that I don't clearly remember what questions I had when I came across certain facts. But, in this article, I'll just try to present some facts and the consequent questions that could come up in

a questioning mind. The answers will not be part of this piece, but they are more or less common knowledge. You probably know them already. If not, try guessing or making a logical inference. Or just ask me. ☺

• **Fact:** The Earth is farthest from the Sun around June-July and nearest around December-January.

• **Question:** How come we have summer when the Earth is farther from the Sun, and winter when it is closer?

• **Fact:** Indians knew about 9 planets long before the rest of the world.

• **Question:** Ok, we knew Mars (Mangal), Mercury (Budh), Jupiter (Guru), Venus (Shukra) and Saturn (Shani). Was Earth one of the 9 planets, and what did we call Uranus, Neptune and Pluto?

• **Fact:** The Earth takes about 23 hours, 56 minutes and 4 seconds to complete one rotation.

• **Question:** Why do we have a 24-hour clock?

• **Fact:** Venus and, less often, Mercury are called the Morning and Evening Stars as they can be seen only near the western or eastern horizon during the early evening or early morning.

• **Question:** Why can't they be seen at other times in the night like other planets?

• **Fact:** Astrology is an offshoot of Astronomy, and Zodiac signs are essentially constellations of stars as observed by the naked eye. As per Hindu Astrology, depending on a person's time of birth, he/she is assigned one of 12 Rashis (constellations) and one of 27 Nakshatras (stars).

• **Question:** Can a Rashi be determined if one knows the Nakshatra?

-Ben Naraharinath S

How far we have come



What is there that is more interesting than space? Never ending, always expanding, full of stars and suns and planets and untold mysteries - as long as we live, we won't know all the secrets that this great vacuum holds. But that doesn't stop us trying to learn absolutely everything we can about it!

And we have come a long way in this endeavor. From refusing to believe that the Earth rotates around the Sun to now having a photograph of a black hole, it is progress at its best. Yet, there is a long way to go. From the complex role, dark matter plays to the intriguing possibility of life outside earth.

Why do we collectively share this inquisitiveness? Because, everyone of us, at some point or another, have been curious about the vast nothingness surrounding us. Scientifically, philosophically or both.

Editorial- Ben Praharsha

Where do we come from? How was the universe created? Are we alone? Do parallel universes exist? Is there a purpose for life? The whole deal about time? These are some of the questions, humanity has set to seek answers to since time immemorial. Maybe we are closer to answering than before or maybe all this is a futile attempt, either way we won't find out till we try.

Trying we are. The whole world seems to be in a race to get out of this world. I can see why, the planet is not going to be habitable soon. What point is it finding out where we came from if we are making sure that the end of us will be us? Earth is part of the space too, let us take care of it.

Who did it?



A Japanese ship was leaving the port and on its way to open sea. The captain went to go oil some parts of the ship and took his ring off so it wouldn't get damaged. He left it on the table next to his bunk. When he returned, it was missing. He had suspected three crew members could be guilty and asked them what they had been doing for the ten minutes that he had been gone.

The cook said, "I was in the kitchen preparing tonight's dinner."

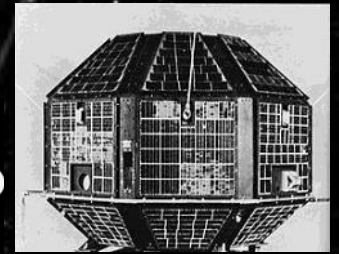
The engineer said, "I was working in the engine room making sure everything was running smoothly."

The seaman said, "I was on the mast correcting the flag because someone had attached it upside down by mistake."

Can you help figure out who did it?

Answer to last month's Who Did It:

The man asked for 11 so that the officials think he would release the passengers. Further, the officials would not give him damaged ones, as they ran the risk of one of the passengers getting it.



Vikram Ambalal Sarabhai was an Indian scientist and innovator widely regarded as the father of India's space programme. Started as Indian National Committee for Space Research in 1962

INCOSPAR grew into ISRO in 1969 under the Department of Atomic Energy. In 1972 Government of India setup a Space Commission and the Department of Space, bringing ISRO under it.

At 360 kgs, ISRO built India's first satellite, Aryabhata, which was launched by the Soviet Union on 19 April 1975.



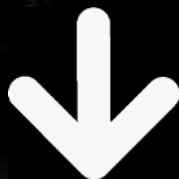
India's first lunar mission, Chandrayan I, landed on the moon on 14-11-18. In a major boost to the country's space program, we became the 4th nation to reach the moon. What is more, we found water there too.



Polar Satellite Launch Vehicle, After its first successful launch in October 1994, PSLV emerged as the reliable and versatile workhorse launch vehicle of India with 39 consecutively successful missions by June 2017



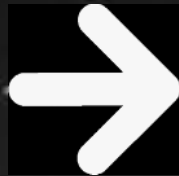
On April 10th 1982, ISRO launched the first of its INSAT satellites. This series of multi-purpose geostationary satellites went on to become the largest domestic communication system in the Asia Pacific Region



The Indian Space Journey



India's first venture into inter planetary travel was the Mars mission, Mangalyaan, in 2014. This first, first time successful mission set benchmarks in both technology and cost efficiency.



With 97 spacecraft missions, 69 launch missions and 239 satellites launched for 28 foreign countries, ISRO is now the sixth largest space agency in the world.



ISRO's future endeavors include, a manned mission, a mission to the sun and follow-up Martian and lunar missions along with several satellites and more technologically advanced launch vehicles.

All the stars in the sky



"Twinkle twinkle little star how I wonder what you are"

The first rhyme every person learnt during their childhood. Even now a few wonder what they are, how do they look? What are they made of? Everything and anything about them. Stars, constellations, planets, universe and galaxies, have always intrigued us through the ages. Every person dreams to aim at the stars and some to reach to the stars.

For me stars were little solids, which shine bright, light years away to catch. These little things make me wonder how are they created and shine so bright. Every night I look up at the sky I see them and admire them to the fullest extent possible.

Once I just went through one of my astronomy book and gained some amazing knowledge. There are 88 officially recognized constellations in the sky, and these astronomical patterns have a fascinating and long history.

The 88 different constellations divide up the entire night sky as seen from all around the Earth.

The maps of the stars represents the position of the stars as we see them from Earth. The stars in each constellation may not be close to each other at all. Some of them are bright because they are close to Earth while others are bright because they are very large stars. Star maps are made of the brightest stars and the patterns

that they make which give rise to the names of the constellations. Few of the famous constellations are Orion , Ursa major , Ursa minor , Draco & The Zodiac.

Not all of the constellations are visible from any one point on Earth. The star maps are typically divided into maps for the northern hemisphere and maps for the southern hemisphere. The season of the year can also affect what constellations are visible from where you are located on Earth.

The fact is, no matter where you are, you always have millions of orbs to look up to and know that you are not alone.

-Ben Adithi Venkatesh

A NIGHT UNDER THE STARS. THE PERFECT COMBINATION OF ROMANCE, PEACE AND SERENITY. WHO AMONG US DO NOT HAVE A FASCINATION FOR UNRAVELING THE MYSTERIES OF SPACE? OF WHAT LIES BEYOND THE AEROPLANES AND THE CLOUDS?

SOME OF US TAKE THIS PASSION FORWARD, AND MAKE IT OUR PROFESSION. FOR SOME, IT'S A HOBBY. AND FOR OTHERS, IT REMAINS JUST SOMETHING THEY LIKE. BUT WHETHER IT IS A PASSION OR A PROFESSION, WE ALL CELEBRATE THE INTERNATIONAL SPACE DAY. ON THE THIRD OF THIS MONTH.

SO HERE'S TO INFINITY AND BEYOND!

I Realise



Space. Vast. Mysterious. Constant. Infinite. It was there before us and rest assured it will be there after us. Constantly bringing out the curiosity in us. That has been a recurring thing, no? How we are curious about space. How we stare at the stars and wonder. I now wonder what do you wonder? Is it about how tiny we are in the broad prospect of things or how the stars you are seeing are probably dead because they are billions of light years away? Because they are. They either imploded or exploded, but they surely died.

On a completely unrelated note, romanticisation is defined as to talk about something in a way that makes it sound better than it really is, or to believe that something is better than it really is.

Okay, maybe it was not that unrelated. Do we romanticize space? The boundlessness we see every time we see up. We can not really deny that we have. Atleast, not if we are being completely honest with ourselves. We have been obsessed since generations. Our ancestors have believed that our entire lives revolved around the stars we see. Literally. We spend millions of rupees on sending equipment to space, the equipment on which hundreds of people spent thousands of hours working on. I wonder why.

It is beautiful. The stars are glowing celestial orbs and the moon is the mama we call upon to put kids to sleep. Does the aesthetic have anything to do with our fixation towards it? Are we are all just moths attracted to bright shiny things in

the space, I wonder.

Have you noticed how all countries have a space program? Democratic, socialist, totalitarian all of us have a space program. Is that the common bonding thread between us? Our collective fascination for what is there beyond. Or is this another part of a rat race? To be fair, that is how America went to the moon. They did not want to fall behind their rival, Russia in anything and had to one up Russia's satellite launch by sending someone to the moon. India is sixth in that race, right now. I wonder, what it means.

And then I realize I should stop staring at the stars now because they sure make me wonder. I am human, after all.

-Ben Praharsha

THE HOTTEST PLANET IN OUR SOLAR SYSTEM IS 450° C.



Venus is the hottest planet in the solar system and has an average surface temperature of around 450° C. Interestingly, Venus is not the closest planet to the Sun – Mercury is closer but because Mercury has no atmosphere to regulate temperature it has a very large temperature fluctuation.

HALLEYS COMET WON'T ORBIT PAST EARTH AGAIN UNTIL 2061.

Discovered in 1705 by Edmond Halley, the famous comet was last seen in 1986 and is only seen once every 75 to 76 years.

A FULL NASA SPACE SUIT COSTS \$12,000,000.

While the entire suit costs a cool \$12m, 70% of that cost is for the backpack and control module



NEUTRON STARS CAN SPIN 600 TIMES PER SECOND.

Neutron stars are the densest and tiniest stars in the known universe and although they only have a radius of about 10 km (6 mi), they may have a mass of a few times that of The Sun. They can rotate at up to 60 times per second after they are born from a core-collapse supernova star explosion and have been known to spin as fast as 600-712 times per second because of their physics.



THE FOOTPRINTS ON THE MOON WILL BE THERE FOR 100 MILLION YEARS.

The Moon has no atmosphere, which means there is no wind to erode the surface and no water to wash the footprints away. This means the footprints of the Apollo astronauts, along with spacecraft prints, rover-prints and discarded material, will be there for millions of years

The unknown about the unknown

IF TWO PIECES OF THE SAME TYPE OF METAL TOUCH IN SPACE THEY WILL PERMANENTLY BOND.

This incredible fact is also known as cold welding and it happens because the atoms of two pieces of metal have no way of knowing they are separate. This doesn't happen on Earth because of the air and water found between the pieces.

IN 3.75 BILLION YEARS THE MILKY WAY AND ANDROMEDA GALAXIES WILL COLLIDE.

The Andromeda Galaxy is approaching the Milky Way – where our solar system is – at rate of around 110 kilometres per second (68 mi/s) and eventually the two will collide to form a giant elliptical galaxy.



THE LARGEST KNOWN ASTEROID IS 965 KM (600 MI) WIDE.

Discovered by Italian astronomer Giuseppe Piazzi in 1801, the dwarf planet Ceres was the first, and largest, object to be considered an asteroid. It is located in the Asteroid Belt between the orbits of Mars and Jupiter and accounts for 33% of the entire belt's mass.



ONLY ONE SPACECRAFT, THE VOYAGER 2, HAS FLOWN PAST NEPTUNE.

It happened in 1989 and captured the first close-up images of the Neptunian system. It took 246 minutes – four hours and six minutes – for signals from Voyager 2 to reach back to Earth.



-Ben Raj



The Pale Blue Dot

Pale Blue Dot is a photograph of planet Earth taken on February 14, 1990, by the *Voyager1* space probe from a record distance of about 6 billion kilometers. In the photograph, Earth's apparent size is less than a pixel; the planet appears as a tiny dot against the vastness of space. There are many poignant reflections made on how "every human being who ever lived, lived out their lives, on that tiny blue speck." Let us have Calvin sum it up for us.



JUST B ENT THINGS

MEME OF THE MONTH



BRS as on 25.05.2019

Note: The points in BRS are being calculated fresh from Feb 16th 2019 onwards.

Rank	Name	Points
1	Ben Adithi	12
2	Ben Raj	10
3	Ben Krishnaveni	10
4	Ben Srikanth	8
5	Ben Utkarsh	7
6	Ben Sudha	4
8	Ben Uday	4
9	Ben Siddarth	4
10	Ben Bharat	3
11	Ben Srujana	2

No change in BRS

Owing to the lack of any sessions conducted during the past month in BFMC, the BRS has undergone no changes and has Ben Adithi still leading.

Consolidated Meeting Report

On 19 May 2019, the club officially met for the first time in this month. The main agenda was a membership drive, the idea for which was put forth by the President for increasing the members of the club. As the members brainstormed and came up with their opinion, various action plans came up, and a vision took shape.

In order to get more members, the general body has devised a plan to organise intercollegiate competitions for the colleges located in and around Malkajgiri. This is, solely to bring awareness of the existence of the club and hopefully, to get more members. The college's identified were Bhavan's, St Francis, Aurora Design institute, and Anish College of Commerce. Akhil, an enthusiastic guest, offered to coordinate with Bhavans along with Ben Praneeth and also get resources for Anish College of Commerce. Bens Srujana and Sudha had taken the responsibility of coordinating with St Francis Junior College, of which they

are both alumnus. Ben Adithi, a student of Aurora Design Institute, will take up the possibility of having a tie-up with the already existing Literary Club in their college once she is finished with her exams.



The plan has various steps, ifs and buts. Firstly, the members are going to do a research on the literary clubs of the above mentioned colleges through acquaintances. Next, they will put forth an idea for a collaboration

and request the heads of the institutions to grant permission to proceed with it, and conduct a college level competition under the combined banner if BFMC and the college club. This process, as proposed by the members of the club, would perhaps gather more strength to this club and make it a bigger one.

It is most unfortunate to put down in black and white that the club hasn't functioned in the first two weeks of this month, i.e., on 5th and on 12th due to lack of quorum. Certain members of the club had to be restricted from attending the club due to the ongoing semester exams and others had different set of priorities. Whatever the cause, the quorum was so minimal that the sessions had to be cancelled. And the hope is that this plan of action brings some change.