

WELCOME TO THE JOURNEY OF PHYSICS

Congratulations!!

Dear Reader for stepping into one of the most versatile subject of the era.

It is well said by Ernest Rutherford

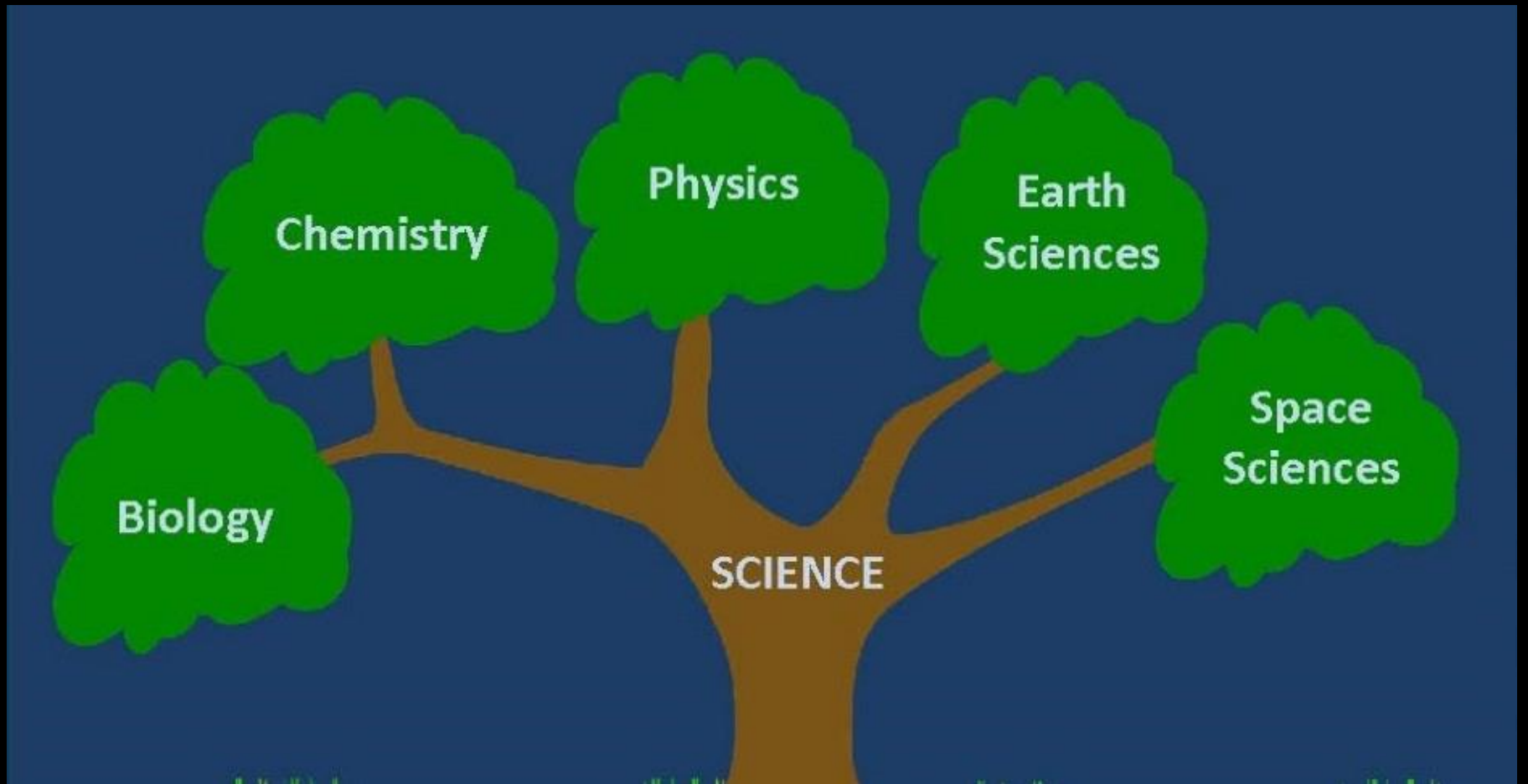
" All science is either Physics or stamp collecting"

Let us share with you the enthusiasm and joy of learning Physics. Hold on your seats and tie up your

seat belts as we begin with our journey in the world of Physics.

STATION I: PHYSICS IN SCIENCE!!

Dear Readers, We are already familiar with Science which is the study of nature and behaviour of natural things and the knowledge that we obtain about them. Let us get familiar with some branches of science by looking at the tree of knowledge.



STATION 2: WHAT IS PHYSICS??

Answers are many but the best way to define it is:

"Physics is really nothing more than a search for ultimate simplicity, but also for all we have is a kind of elegant messiness"

Physics also best known as "Physical Science" is a science where an individual changes the perspective of observing his life in a more meaningful way.

Physics gives life a meaning; it arises with a question which leads to a quest for finding its reason and ends up with in-depth discoveries.

STATION 3: NEED OF PHYSICS IN OUR LIFE??

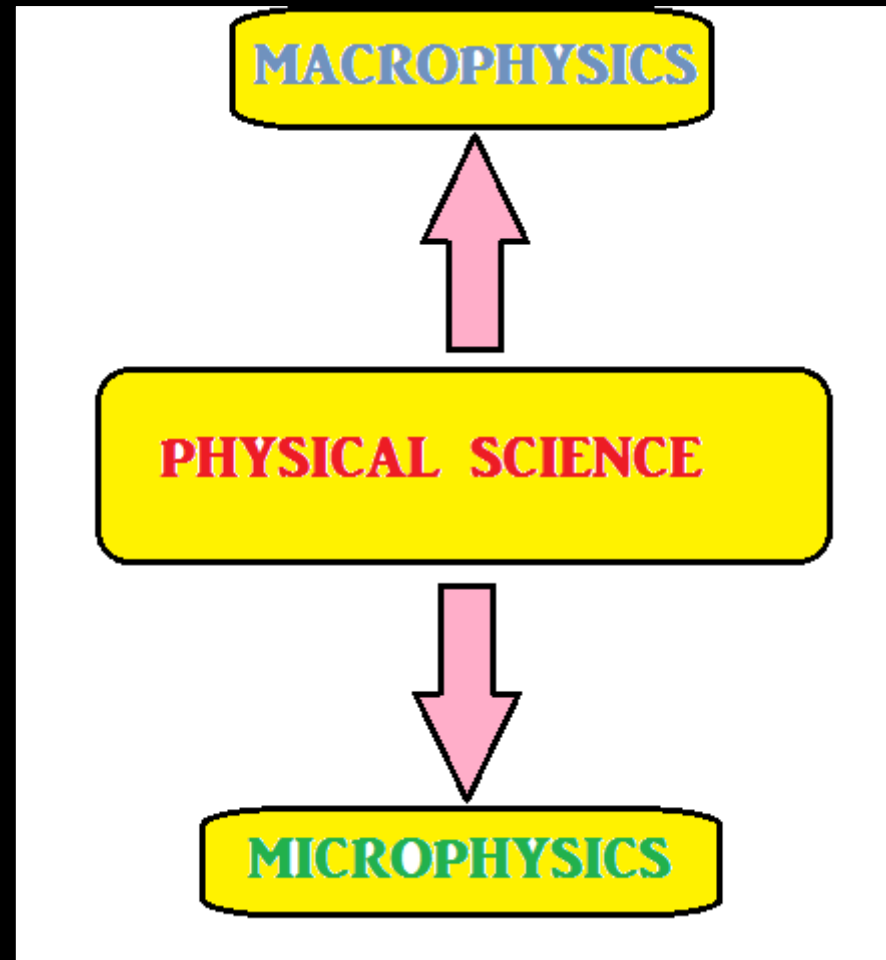
It is well said that Physics is the necessity of life rather than a subject.

The time we wake up till the time we are in bed we are all surrounded with the phenomena's of physics. Let it be it the motion of tap water flowing from tap due to Fluid Mechanics or the spreading of toothpaste due to Surface tension all applies to Physics.

"Any sort of technology we use in our daily life has the backbone as Physics"

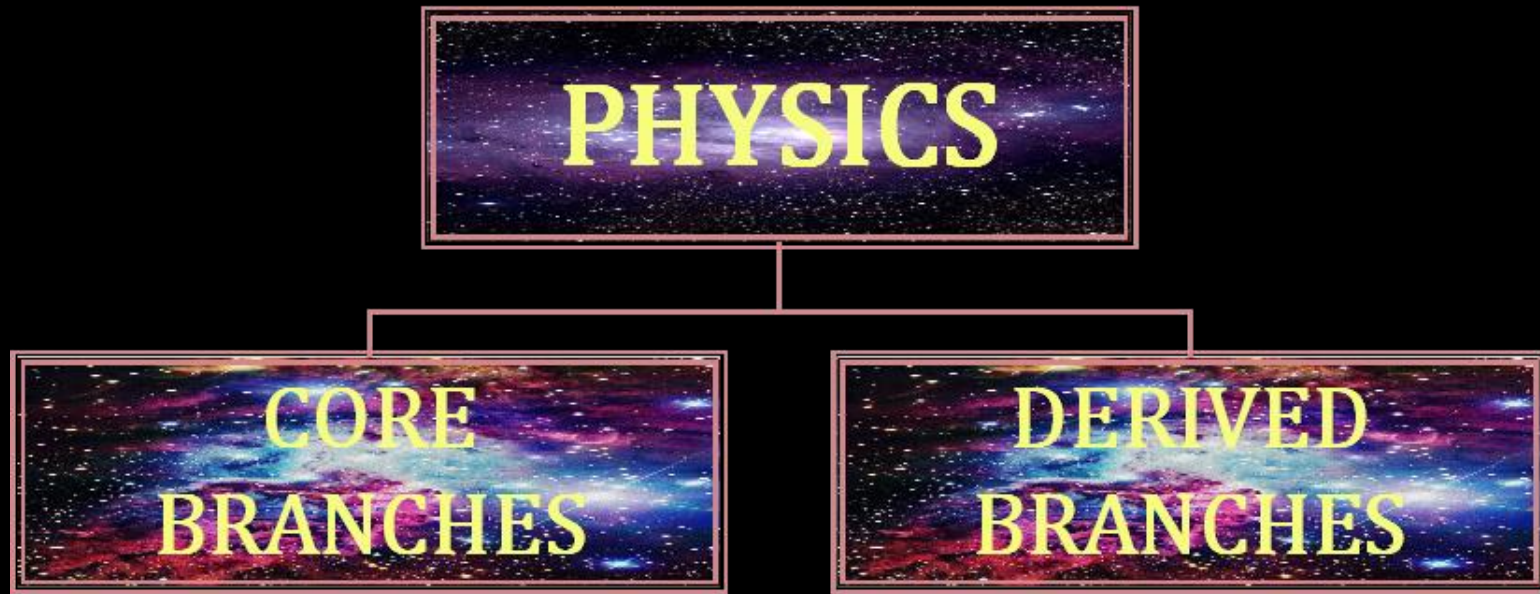
STATION 4 ROAD MAP OF PHYSICS:

Physics is best described as an infinite scale which has no end. It's one end heads towards "Macrophysics" which open the dark secrets of black holes while other end solves the mysteries lying in "Microphysics" like Quantum Tunnelling and Time Travel.



Branches of Physics:

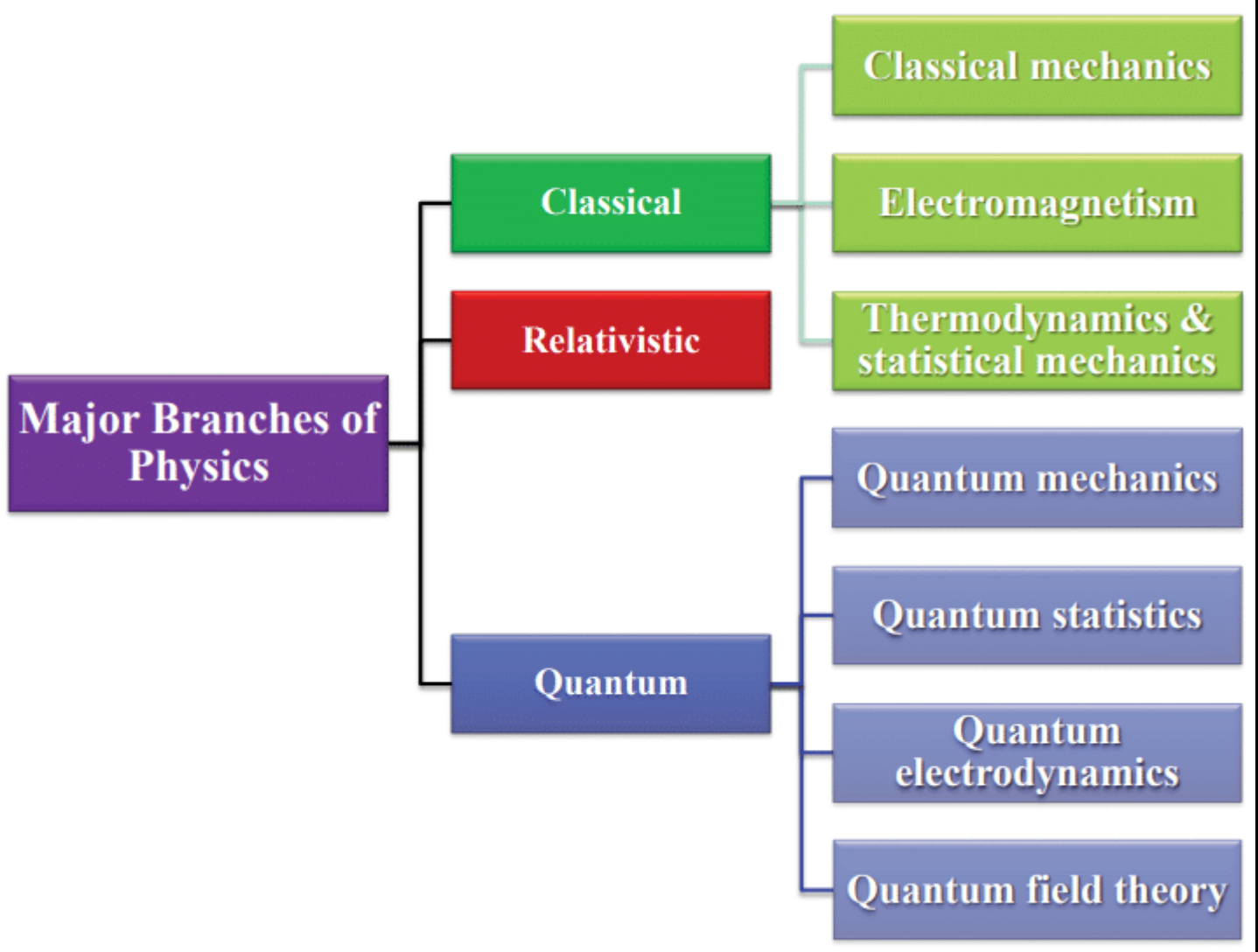
Physical Science is a vast part of science as it has its applications lying as a backbone for numerous fields of science which involves Chemical Science, Life Science, Earth Science and vice versa.



CORE BRANCHES OF PHYSICS

There are 7 core branches of Physics which act as the pillars of this versatile subject and helps it to be called as a "All Rounder's Subject"

These core branches involve the following :



DERIVED BRANCHES OF PHYSICS:

There are many derived branches of Physics which are derived from the core branches.

Some of them are as followed:

- Nuclear Physics
- Astrophysics
- Material Science
- Nanotechnology
- Nano materials

STATION 5: NEED OF PHYSICS IN DIFFERENT FIELDS:

Physics is a backbone for all the branches of science and applies its principle in all the modern technology which will be applied now as well as in upcoming decades. Some of its applications in other branches of science.

- **Physics in Life Science:** Physics provides the basis for biology and has its foundation in biology where it applies physical natural laws to study the following:
- Applied in all medical instruments like MRI, ECG, EEG
 - Applies natural laws in the study of living organisms.
 - Scientists in order to bridge the gap between Physics and biology have used "BIOPHYSICS - A Science which relies on theories and methods related to Physics and explain biological systems". Where now

Biophysics is one of the major subject in medical field.

- **Physics in Chemical Science:** Chemistry is a branch of Physical Science that studies the composition, structure, properties and change of matter. Applied Physics is a physics which is intended for a particular technological or practical use.
- Physics is required to build the laws of chemistry.
- Bridge or connection between chemistry and physics has formed a new branch known as Physical Chemistry.

Likewise Physics plays building block in the fields of engineering and medical.

FINAL DESTINATION: CAREER OPTIONS IN PHYSICS

Physics for Physicist is not a mere subject but a way of devotion towards universe. Likewise Physics offers a wide range of career option for all its devotees.

Some of the career options apart from engineering and medical are jotted below:

- Accelerator Operator
- Application Engineer
- Data Analyst
- Teaching Fields
- Research
- Lab Technician
- Laser Engineer
- Science Film & documentary Producer

And many more to go.....

Some Renowned Scientific Labs in Pune:

- IISER PUNE
- DRDO
- NCL
- Agarkar Research Institute
- SavitribaiPhule Pune Vidyapeeth

And many more to be listed.....

ARRIVAL

Dear Readers, It gave us immense pleasure to arrive at our destination. In this journey we tried our best to showcase Physics a versatile subject and bring its small glimpse to you.

It is well said by Albert Einstein:

“There are only two ways to live your life. One is as though nothing is miracle. The other is as though everything is a miracle.”

As closure we would love our readers to believe that everything that occurs is a miracle and join us to be a part of this miracle.

Thanks

