

Science for Society

Science for Man

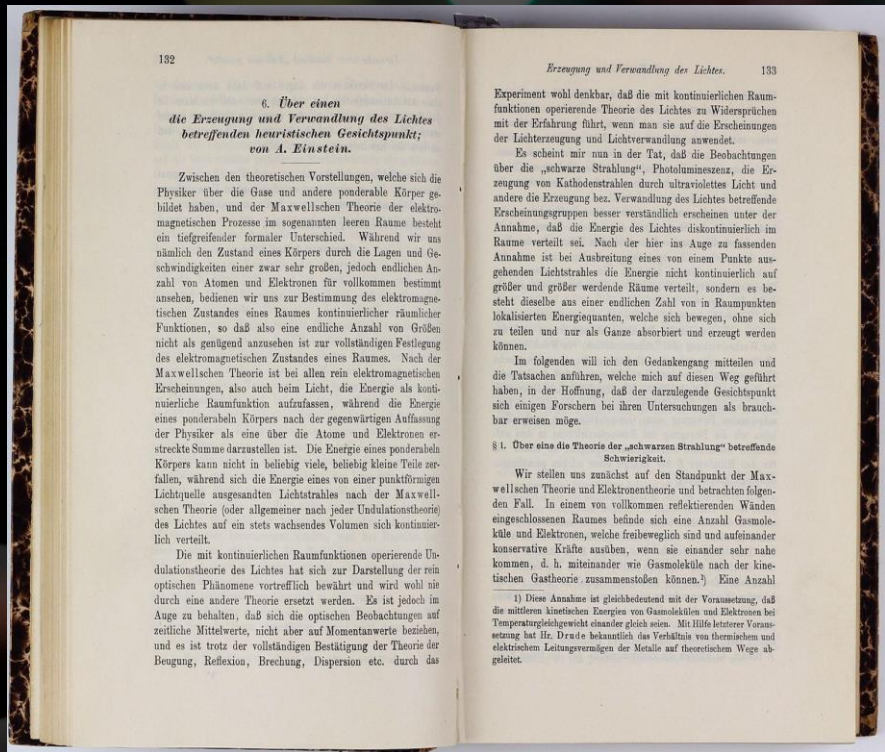
Science in Thinking

Seminar on: Evolution of an Einstein



Breakthrough Science Society
Light Of Science, Jalpaiguri

14th March



‘Zur Elektrodynamik bewegter Systeme’

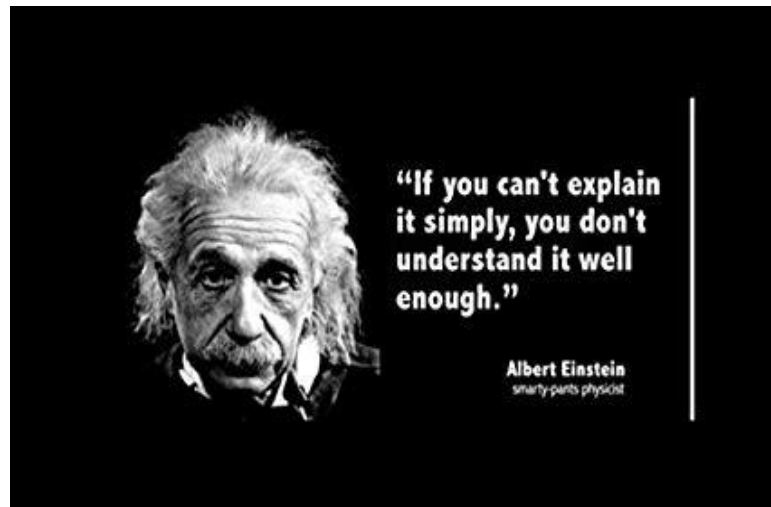
- A breakthrough in classical physics after Newton's *Principia*

Historical Background

❖ **Era of Subjective Interpretation**

❖ **Copernicus and Galileo**

❖ **Objective Interpretation**



The Era of Einstein

- ❖ **Ernst Mach (1838-1916)**
- ❖ **Pierre Duhem (1861-1916)**
- ❖ **Atmosphere of Positivism**



14th March, 1879 - 18th April, 1955
Germany

Positivism And Materialism

A Philosophical contradiction

“A mere clerk” of a Patent office in Berne announces his appearance

$$NP^3 = \frac{3}{4\pi} \frac{m}{\rho} \left(\frac{K'}{K} - 1 \right)$$

N= Avogadro number

P= Mean diameter of Molecule

K= Viscosity of Water

k'= Viscosity of the solution

ρ= Mass of solute per unit volume

m= Molecular weight of the solute

D= Coefficient of Diffusion

$$NP = \frac{RT}{6\pi KD}$$

And the first Thesis (On Brownian Motion)

$$D = \frac{RT}{N} \frac{1}{6\pi K P}$$

$$\lambda_x = \sqrt{2Dt}$$

$$\lambda_x = \sqrt{t} \cdot \sqrt{\frac{RT}{N} \frac{1}{3\pi K P}}$$

λ_x = distance along the the x axis in t time covered by the Polen after random collision with the water molecules.

A black and white portrait of Albert Einstein, showing his characteristic wild hair and mustache, looking slightly to the right.

A person who
never made a
mistake never
tried anything
new.

- **Albert Einstein**

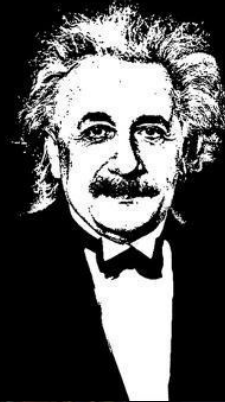
And the Groundbreaking Discoveries:

☐ Photoelectric Effect

☐ Special Relativity

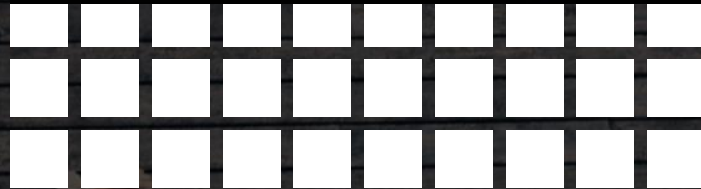
☐ General Relativity

☐ Mass Energy Equivalence $E = mc^2$



*Everybody is a genius.
But, if you judge a
fish by its ability to
climb a tree, it will
spend its whole life
believing that
it is stupid.*
-Albert Einstein

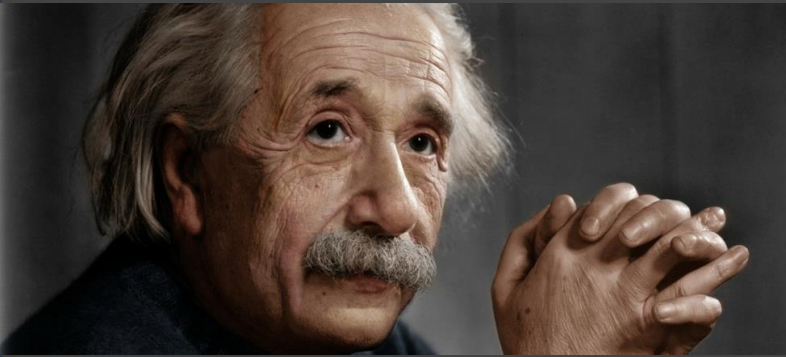
“
A Man is a
product of
process.”



The Black Period

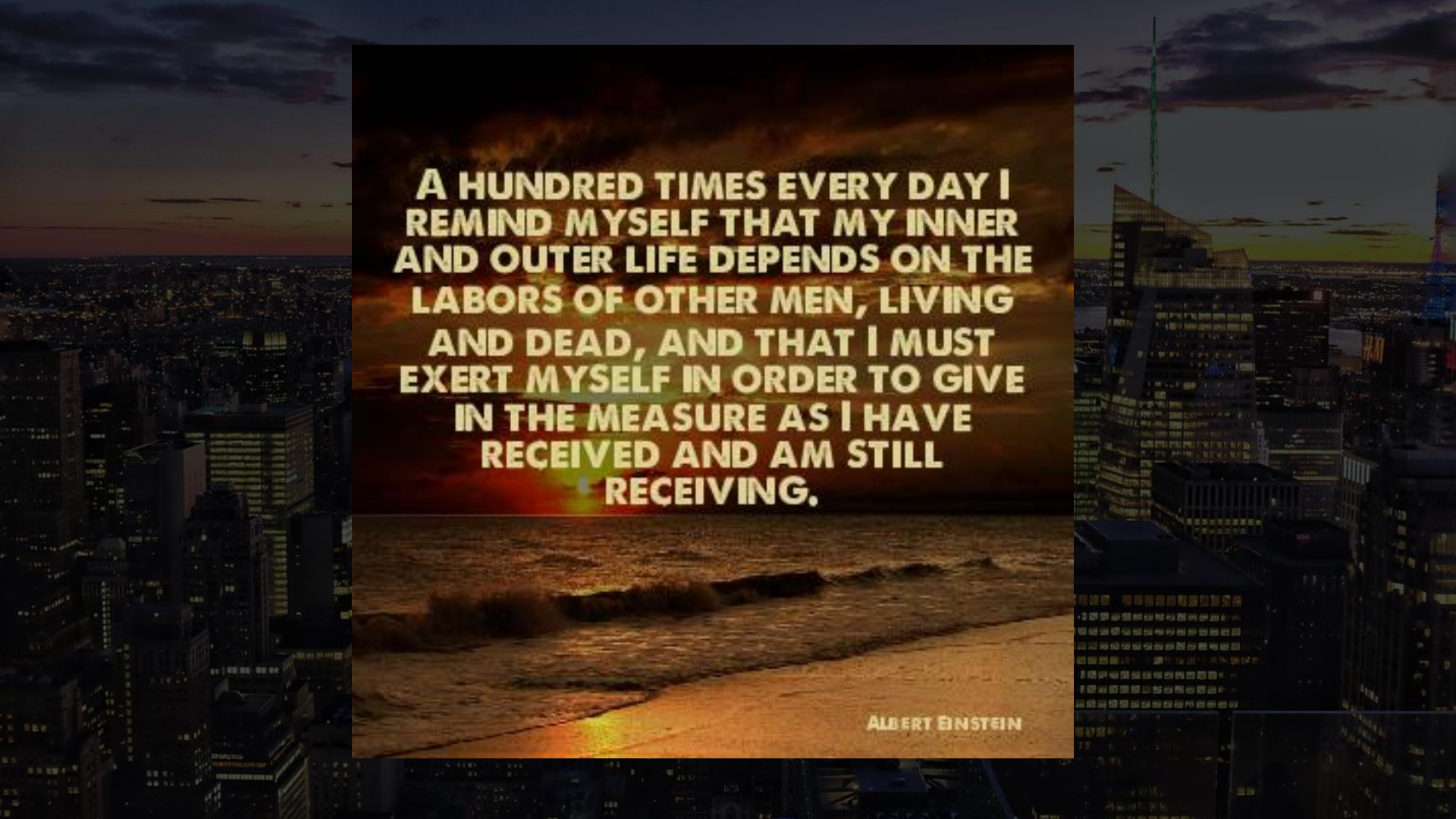


World War II



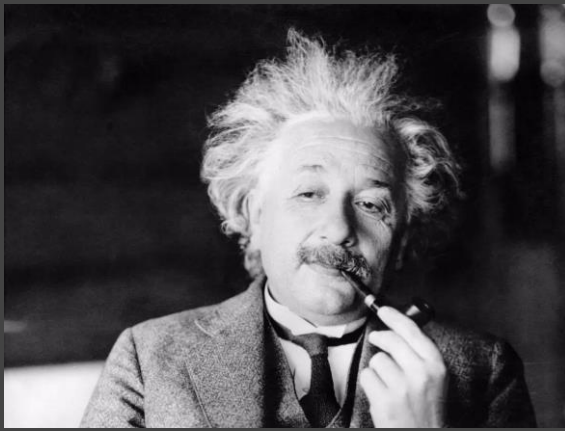
Society and Einstein

“The economic anarchy of capitalist society as it exists today is, in my opinion, the real source of the Evil.”



**A HUNDRED TIMES EVERY DAY I
REMINDE MYSELF THAT MY INNER
AND OUTER LIFE DEPENDS ON THE
LABORS OF OTHER MEN, LIVING
AND DEAD, AND THAT I MUST
EXERT MYSELF IN ORDER TO GIVE
IN THE MEASURE AS I HAVE
RECEIVED AND AM STILL
RECEIVING.**

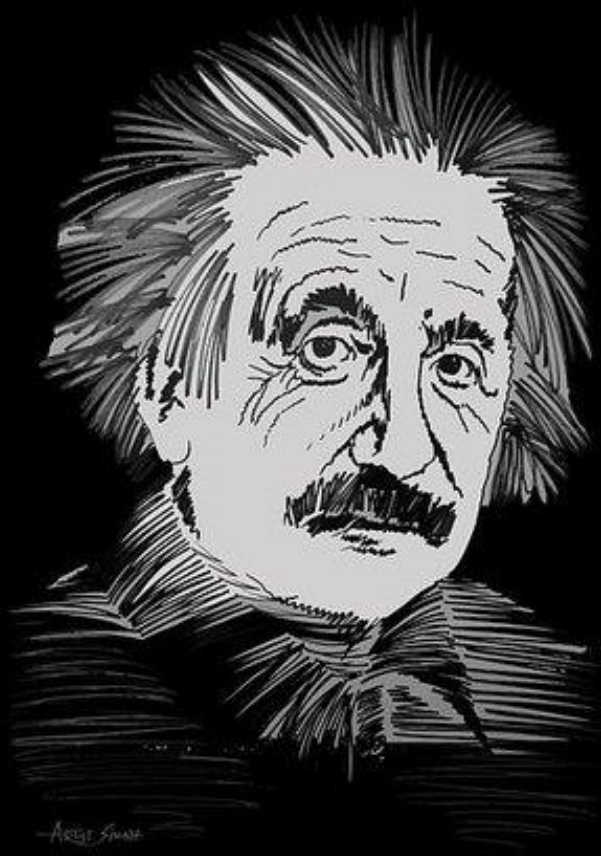
ALBERT EINSTEIN



Einstein On Religion

“I believe in Spinoza’s God. The God who reveals himself in the harmony of what exists ; not in a god who concerns himself with the fates and actions of human being ”

Hour's Call ...

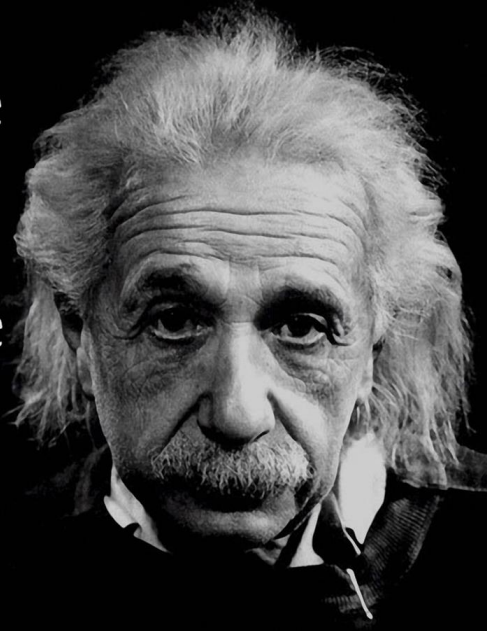


"The important thing is
not to stop questioning;
curiosity has its own
reason for existing."

—Albert Einstein

"Two things are
infinite. The universe
and human stupidity.

...and i'm not so sure
about the universe."



“
”

*Learn from yesterday,
live for today,
hope for tomorrow.
The important thing
is not to stop questioning.*

Albert Einstein

Thank You