



Multidisciplinary Unit of Research on Translational Initiatives (MURTI)

MURTI-Colloquium

Speaker	MURTI DISTINGUISHED
	LECTURE by
	Prof. Ajoy Ghatak
	Honorary Professor at Optics &
	Photonics Center, IIT- Delhi
Topic	Einstein, $E = mc^2$ & The Atom Bomb:
	Events that changed the future of mankind
Day & Date	Friday, 21/03/2025
Time	3:30pm – 5:00pm
Venue	KRC Auditorium
	Abstract enclosed

All are Cordially Invited

B V R Tata

(Distinguished Professor & Head MURTI Labs)

copy to;

- 1. President, GITAM (For information please)
- 2. Hon. Vice Chancellor, GITAM (For information please)
- 3. Pro-VC Campus Life, VIZAG (For Information please)
- 4. Registrar, GITAM (For information please)
- 5. Dean, School of Sciences (For Display on Notice Board)
- 6. Principal, Science College (For Display on Notice Board)
- 7. Dean, School of Pharmacy (For circulation and Display on NB)
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- 10. HoD of Biotechnology (GIT) (Circulation to faculties & Ph.D. Students)

Einstein, $E = mc^2$ & The Atom Bomb

Ajoy Ghatak Formerly Professor of Physics @ IIT Delhi ajoykghatak@gmail.com

Abstract: The equation $E = mc^2$ is probably **the** most famous equation. Einstein derived this equation in his Year of Miracles (1905). In this lecture, by considering a few examples, we will try to understand what exactly it means— and its consequences including as to how a star like our Sun was created. We will also give a simple derivation of the equation $E = mc^2$.



Ajoy Ghatak is currently Honorary Professor at Optics & Photonics Center, IIT Delhi. During Jan 2021- Dec 2022, he was the President of The National Academy of Sciences, India – the oldest Science Academy in India. He did his MSc from Delhi University and PhD from Cornell University. He is a Fellow of OPTICA (formerly OSA) and

SPIE. He has authored several books including his undergraduate text on *OPTICS* which has been translated to Chinese and Persian. He is recipient of several awards including the 2003 OSA Esther Hoffmann Beller Award and the 2008 SPIE Educator award which was in recognition of "*his unparalleled global contributions to the field of fiber optics research, and his tireless dedication to optics education worldwide..*" and also the CSIR 1979 S S Bhatnagar award. He received the OSA 2020 Sang Soo Lee award for *his seminal role in the development of fiber optics and guided wave photonics and for pioneering optics education in India* and the 2021 SASTRA-G N Ramachandran Award for *Excellence in Physics*.