



भौतिक अनुसंधान प्रयोगशाला, अहमदाबाद

Physical Research Laboratory, Ahmedabad

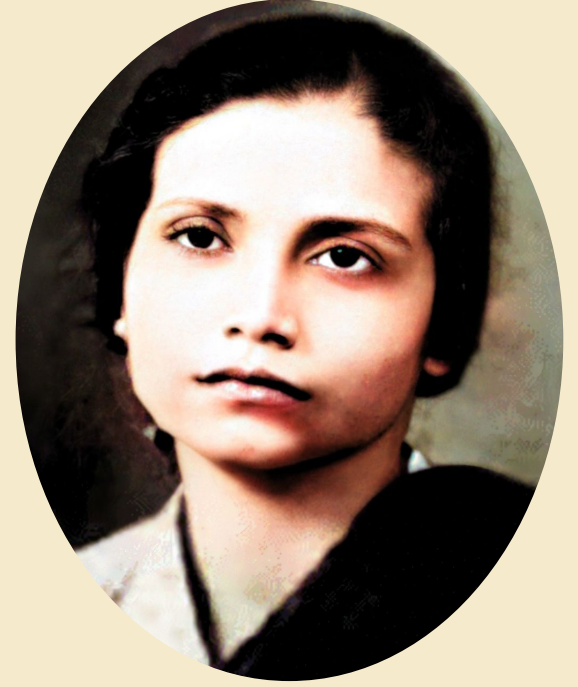
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**First Dr. Bibha Chowdhuri
Memorial Lecture**

on

Wednesday, 31 March 2021

@ 16:00 hrs



Dr. Bibha Chowdhuri (1913-1991)



**“Unlocking
secrets of the
Universe at
CERN”**

Dr. Archana Sharma

Principal Staff Scientist,

CERN Laboratory

Geneva, Switzerland

Online Via **WebEx** and Live stream via **YouTube**

Meeting id: 158 224 5128

Password: 2akU3aTcE2v

WebEx: <https://prldir.webex.com/prldir/j.php?MTID=mf5b9a138ef95bca26882de075a593574>

PRL YouTube Link: <https://youtu.be/Bb5pZOfe40A>

First Dr. Bibha Chowdhuri Memorial Lecture

Title: “Unlocking secrets of the Universe at CERN”

Speaker: Dr. Archana Sharma,

Principal Staff Scientist, CERN Laboratory , Geneva, Switzerland

On

Wednesday, 31 March 2021

Abstract

Imagine a life without the words www or http? They emerged one fine day from a scientific laboratory! The Large Hadron Collider (LHC) at CERN Geneva, Switzerland is home to thousands of high energy physicists. By exploiting large sophisticated radiation detectors, designed and constructed over decades, we are collectively seeking answers to questions about the origin, evolution and composition of our universe. At this forefront of scientific pursuit, working hand in hand with industries, spin off technologies have completely changed our lives. With the world wide web, medical imaging, diagnostic and treatment techniques, high-performance computing, art restoration to name a few - the audacious, innovative cutting edge technologies of particle physics have entered and transformed mainstream society. This talk will trace exciting adventure at CERN and how we can collectively fight pandemics and catastrophes that are unknowns like COVID19 and some known challenges like cancer.

The Speaker

Dr. Archana Sharma is a Principal Staff Scientist at the CERN Laboratory in Geneva, Switzerland active in the field since 1989 mainly working on instrumentation. She is the pioneer of simulations and experimentation on gaseous detectors in high energy physics over the last three decades. A Ph.D. in particle physics from Delhi University in 1989, a D.Sc. from the University of Geneva in 1996, Archana has worked at CERN experiments on R&D and commissioning of large scale gaseous detectors. She also serves as Senior Advisor for Relations with International Organizations at CERN, and focuses on capacity building in India with her foundation: <http://lifelab.org.in/>.