ABSTRACT

John Stachel has written a book with the very appropriate title *EINSTEIN’S MIRACULOUS YEAR: Five Papers That Changed the face of Physics*; the year of miracles was 1905 when Einstein wrote those 5 outstanding papers while working at the Swiss Patent office. In the Foreword of this book, Roger Penrose wrote: *In the twentieth century, we have been greatly privileged to witness two major revolutions…. We have come to use the term ‘relativity’ to encompass the first of these revolutions and ‘quantum theory’ to encompass the second … It is particularly remarkable that a single physicist - Albert Einstein – had such extra-ordinary deep perceptions of the workings of Nature that he laid foundation stones for both of these twentieth century revolutions in the single year of 1905.*

The lecture will be at an elementary level and will give a glimpse of Einstein’s extra-ordinary life, his special theory of relativity, his famous equation $E=mc^2$ and briefly describe the concept of the light quantum.

CV: Ajoy Ghatak did his MSc from University of Delhi, PhD from Cornell University and was a Research Associate at Brookhaven National laboratory. He joined IIT Delhi in 1966 and has recently retired from there as Professor of Physics. He received the 2008 SPIE Educator award in recognition of “his unparalleled global contributions to the field of fiber optics research, and his tireless dedication to optics education worldwide..” and the 2003 Optical Society of America Esther Hoffman Beller award in recognition of his “outstanding contributions to optical science and engineering education”. He is also a recipient of the CSIR SS Bhatnagar award, 16th Khwarizmi International award, the International Commission for Optics Galileo Galilei award, IETE Wadhwa Gold Medal and the UGC Meghnad Saha Award for his research work in the area of fiber optics. He is a Fellow of OSA & SPIE. He has authored over 170 research papers and several books including the undergraduate text OPTICS (published by Tata McGraw Hill in Delhi & McGraw Hill in the US) which has been translated to Chinese and Persian. His other books are INTRODUCTION TO FIBER OPTICS & OPTICAL ELECTRONICS (both co-authored with K Thyagarajan and published by Cambridge University Press), QUNATUM MECHANICS: Theory & Applications (coauthored with S Lokanathan and published by Macmillan India and Springer, New York). His latest book is entitled *Albert Einstein: A Glimpse of his Life, Philosophy & Science*. He received DSc (Honoris Causa) from University of Burdwan in 2007. He has been a Visiting Professor at several European, US and Australian Universities.