



News Letter

Department of Mechanical Engineering

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Subrahmanyan Chandrasekhar FRS (/,tʃœndrə'seɪka: r/;[3] Punjabi pronunciation) (19 October 1910 – 21 August 1995)[4] was an Indian-American theoretical physicist who spent his professional life in the United States. He shared the 1983 Nobel Prize for Physics with William A. Fowler for "...theoretical studies of the physical processes of importance to the structure and evolution of the stars". His mathematical treatment of stellar evolution yielded many of the current theoretical models of the later evolutionary stages of massive stars and black holes.[5][6] Many concepts, institutions, and inventions, including the Chandrasekhar limit and the Chandra X-Ray Observatory, are named after him.

Chandrasekhar worked on a wide variety of problems in physics during his lifetime, contributing to the contemporary understanding of stellar structure, white dwarfs, stellar dynamics, stochastic process, radiative transfer, the quantum theory of the hydrogen anion, hydrodynamic and hydromagnetic stability, turbulence, equilibrium and the stability of ellipsoidal figures of equilibrium, general relativity, mathematical theory of black holes and theory of colliding gravitational waves.[7] At the University of Cambridge, he developed a theoretical model explaining the structure of white dwarf stars that took into account the relativistic variation of mass with the velocities of electrons that comprise their degenerate matter. He showed that the mass of a white dwarf could not exceed 1.44 times that of the Sun – the Chandrasekhar limit. Chandrasekhar revised the models of stellar dynamics first outlined by Jan Oort and others by considering the effects of fluctuating gravitational fields within the Milky Way on stars rotating about the galactic centre. His solution to this complex dynamical problem involved a set of twenty partial differential equations, describing a new quantity he termed "dynamical friction", which has the dual effects of decelerating the star and helping to stabilize clusters of stars. Chandrasekhar extended this analysis to the interstellar medium, showing that clouds of galactic gas and dust are distributed very unevenly.

Chandrasekhar studied at Presidency College, Madras (now Chennai) and the University of Cambridge. A long-time professor at the University of Chicago, he did some of his studies at the Yerkes Observatory, and served as editor of The Astrophysical Journal from 1952 to 1971. He was on the faculty at Chicago from 1937 until his death in 1995 at the age of 84, and was the Morton D. Hull Distinguished Service Professor of Theoretical Astrophysics.

JOURNAL PUBLICATIONS

Mrs. Saigayathri Lahari P, Dr. M Udaya Kumar, Mrs.I Sowjanya from Department of Mechanical Engineering got their paper titled "Experimentation and study of Abrasive water jet cutting of AA6061" published in the journal "JOURNAL OF THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA". The paper carrying ISSN number: 0025-0422 can be found at https://ugccare.unipune.ac.in/apps1/content/files/pdf/journalofthemaharajasayajiraouniversityofbarodaoriginal.pdf

Mrs. Saigayathri Lahari P, Dr. M Udaya Kumar, Mrs.I Sowjanya from Department of Mechanical Engineering got their paper titled "Experimentation and study of Metal Spinning of pure copper by using Taguchi methodology and Regression analysis" published in the journal "The Journal of oriental Research Madras". The paper carrying ISSN number 0022-3301 can be found at https://ugccare.unipune.ac.in/apps1/content/files/pdf/the%20journal%20of%20oriental%20resea https://www.nc.in/apps1/content/files/pdf/the%20journal%20of%20oriental%20resea

Department of Mechanical Engineering

VISION

To be a reputed centre of excellence in the field of Mechanical Engineering by synergizing innovative technologies & research for the progress of society.

MISSION

Methodist College of Engg. 8 Page - 2 M1: To impart quality education by means of state-of-the-art infrastructure.
M2: To involve in training & activities on leadership qualities & social responsibilities.
M3: To inculcate the habit of lifelong learning, practice professional ethics & serve the society.
M4: To establish industry- institute interaction for stakeholder development