

वीईसीसी संगोष्ठी / VECC Seminar
परिवर्ती ऊर्जा साइक्लोट्रॉन केन्द्र, कोलकाता
Variable Energy Cyclotron Centre, Kolkata

तारीख / Date: 27.01.2025

- Speaker-

Dr. S. M. Yusuf

Present position:

Distinguished Scientist of the Department of Atomic Energy,
Director, Physics Group of Bhabha Atomic Research Centre,
Senior Professor of Homi Bhabha National Institute.

विषय/Topic-

Spin Quantum Entanglement and Related Technology

-दिनांक - /-Date-

बर/January 31st, 2025 (शुक्रवार /Friday)

-समय/Time-

15:30 बजे/ 15:30 Hr

स्थान / Venue-

व्याख्यान कक्ष/ Ajay Divatia Lecture Hall
वीईसीसी, कोलकाता/VECC, Kolkata
सभी सादर आमंत्रित हैं/All are cordially invited,

पर्णिका दास / Parnika Das

संगोष्ठी सचिव / Colloquium Secretary

नोट/Note: चाय/ कॉफ़ी 15:00 बजे से दी जायेगी/Tea / Coffee will be served from 15:00hrs onwards.

Spin Quantum Entanglement and Related Technology

Prof. S M Yusuf, D. Sc(h.c), FNA, FASc, FNASc, FTWAS, J. C Bose National Fellow

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Entanglement is a non-local property of quantum states and it has no classical counterpart. Entanglement plays a decisive role in quantum information, especially in quantum communication. We have made experimental realization of quantum entanglement of electronic spins in novel low dimensional spin systems. In my talk, I shall introduce the subject of quantum entanglement including the spin entanglement. I shall then present experimental as well as theoretical results of our several recent studies in this area. My talk will outline the underlying physics that is responsible for the exotic spin entangled states. I will highlight the relevance of such entangled states in quantum technology. My talk will also include the current efforts on quantum technology in BARC in the backdrop of National Quantum Mission Program of Government of India.