

Spin Entanglement and Quantum Technology

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Entanglement is a non local property of quantum states and it plays a decisive role in quantum information, especially in quantum communication. Entanglement has no classical counterpart. In my talk, I shall introduce the subject of quantum entanglement including the spin entanglement. I shall then present the results of our several recent experiments on quantum entangled spin states. I will also describe the underlying physics that is responsible for novel and exotic spin entangled states. My talk will outline the relevance of such entangled states in quantum technology. The talk will also include the current efforts on quantum technology in BARC in the backdrop of National Quantum Mission (NQM) objectives of Government of India.