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Departmental Seminar

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Seminar Title	: Application of the Generalized Hermite Wavelet Technique to Improve Optimal Control Systems
Speaker	: Akanksha Singh
Supervisor	: Prof. Ankur Kanaujiya
Venue	: Seminar Room (Department of Mathematics)
Date and Time	: 28 Jul 2025 (04:00 PM)
Abstract	: This study introduces a novel class of optimal control problems that incorporate the distributed-order derivative operator. The generalized Hermite wavelet is employed to approximate the state and control functions and the distributed-order Riemann–Liouville integral. Subsequently, the Galerkin method combined with the Lagrange multiplier technique is applied to derive the optimal solutions. Several real-world examples demonstrate the proposed approach's effectiveness and accuracy.