

6th Annual Meet on **ADVANCES IN PHYSICS, MATHEMATICS AND APPLIED SCIENCE**

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TRAJECTORY CONTROLLABILITY OF NONLINEAR SYSTEMS-AN ANALYTICAL AND A NUMERICAL APPROACH

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Most of the practical systems are nonlinear in nature. In the control theory we steer the system from the initial state to the final desire state, but we do not know the path (trajectory) along which system moves. If we know the path then we can safe guard the system and also we can minimize the cost involved in steering the system. In this talk we will discuss the new concept called the trajectory control. We will discuss the trajectory controllability of the nonlinear system in finite and infinite dimensions using a monotone operator theory and a fixed point approach. After analytical analysis we will study the numerical analysis of the same systems and their practical approach. Examples will be provided for all different systems to illustrate the theory. I will let you know how analytical results match with the numerical results. We will discuss about the subsequent approaches and the future aspects of this talk for the researchers working in the field of control theory.

Biography

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