National Institute of Technology Rourkela

Departmental Seminar	
Seminar Title	: On P_4-free power graphs
Speaker	: Ranjit Mehatari
Supervisor	: Prof. Ranjit Mehatari
Venue	: Seminar Room (Department of Mathematics)
Date and Time	: 14 Jul 2025 (11:00 am)
Abstract	: Let G be a finite group. The power graph of G, denoted by $P(G)$ , is a graph whose vertex set is G, and two vertices in $P(G)$ are connected by an edge if and only if one of them is a power of another. We start by going over some properties of power graphs. Then we characterize finite groups with no induced subgraphs isomorphic to a path on four vertices. Keywords: Power graph, induced subgraph, cograph, nilpotent group.