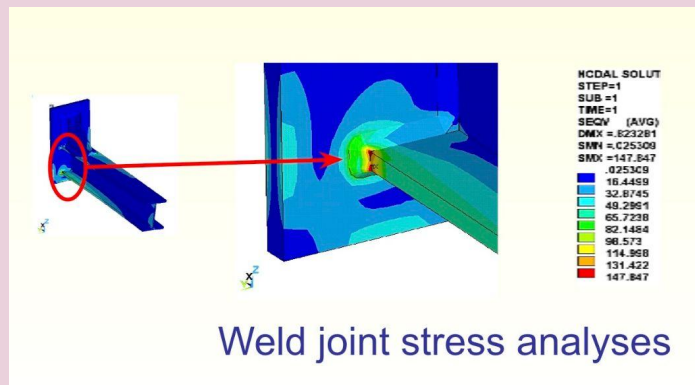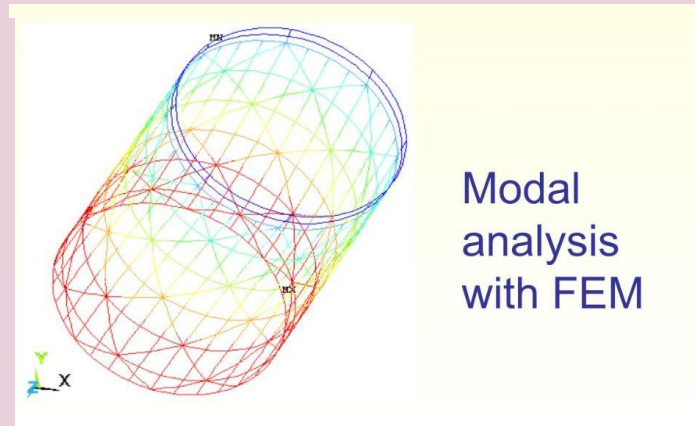**Centre for Railway Research**
IIT Kharagpur

Workshop on
Design and Failure Analyses
with ABAQUS FEA

February 18th to 22nd, 2024

- FEA (Finite element analysis) mathematical background, role of element type, element size, integration scheme, BCs, ICs, etc. on accuracy and computational complexity.
- Eigenvalue analysis (buckling, vibrations)
- Static and fatigue failure analysis
- Post processing
- Scripting for automating tasks

Modal analysis with FEM

Weld joint stress analyses

Coordinator

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