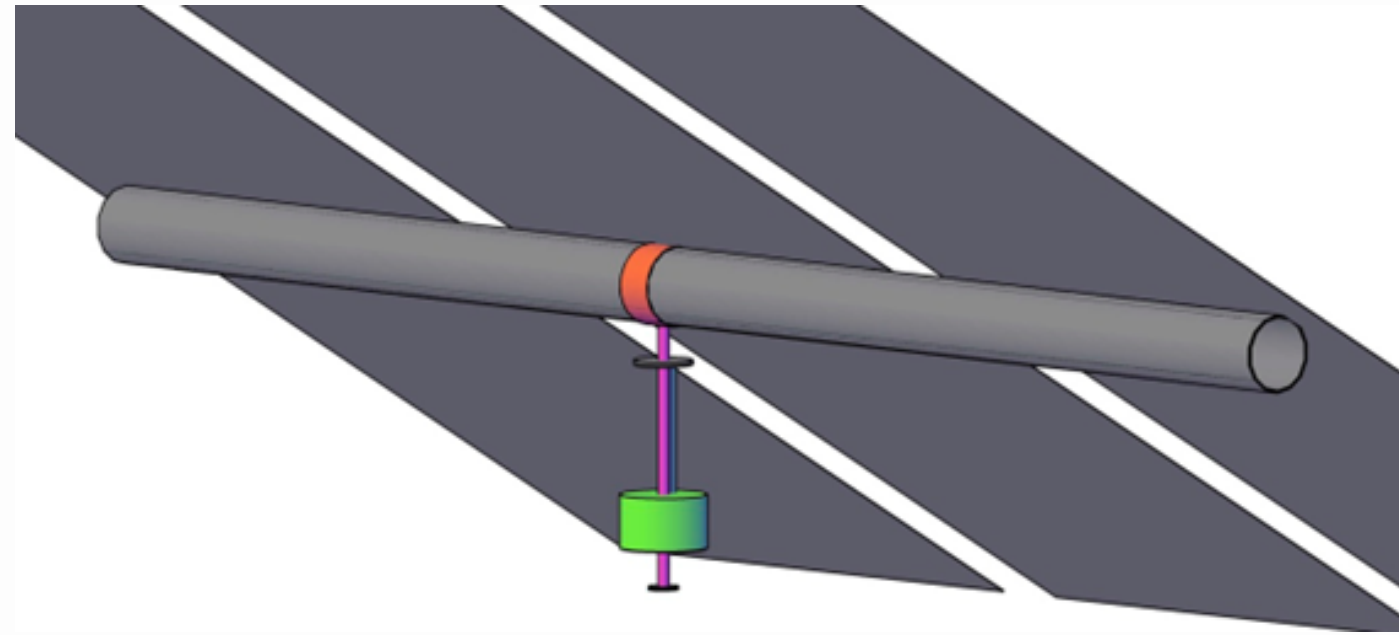


Mitigating Vibrations in Single-Axis Solar Trackers



The Problem

- Structural risks from wind-induced vibrations (e.g., aeroelastic fluttering);
- Single-axis trackers (SATs) are particularly vulnerable;
- Vibrations lead to system failures and reduced efficiency.

Our Solution

- Tuned Mass Dampers: Counteract wind vibrations by tuning to the system's natural frequency;
- Results: Reduces structural damage, improves stability, and prevents efficiency loss.

Benefits

- Low Cost: Uses affordable components;
- Proven Tech: Inspired by wind-damping systems in skyscrapers;
- Scalable: Suitable for existing and new solar farms.

Next Steps

- Prototyping;
- Field Testing;
- Securing a patent.

