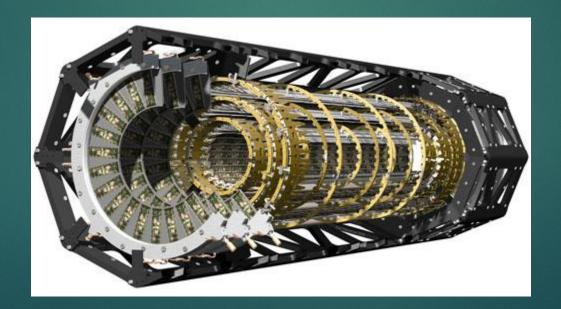
Improving the HALT Procedure for ATLAS Pixel Detector Modules

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COLE LE MAHIEU

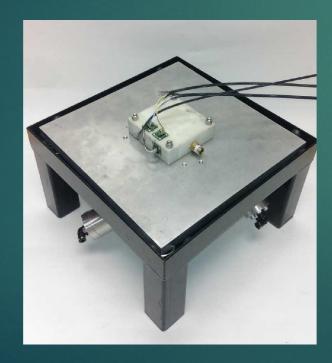
Project Significance

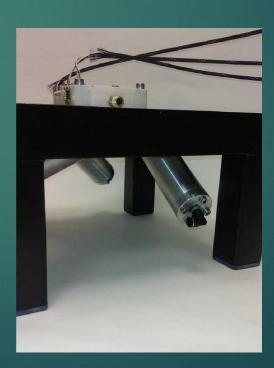
- ▶ ATLAS, one of the LHC's detectors, is being upgraded
- New Pixel Detector Layer
- Vibrational table tests durability of pixel detector modules



Testing the Modules

- HALT Highly Accelerated Lifetime Testing
- Find weakness in pixel detector chips
- ▶ The vibrational table:





Improving the Process

- ▶ Looking for consistent correlations between pressure and acceleration
- Switch to using an electric motor?
- Experiment with thermal stress