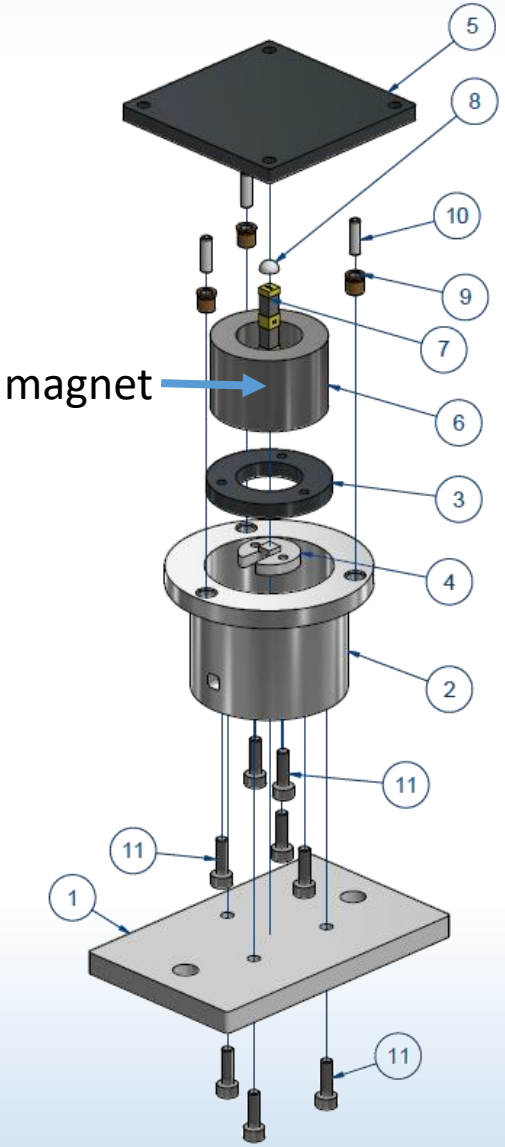
WP10 status

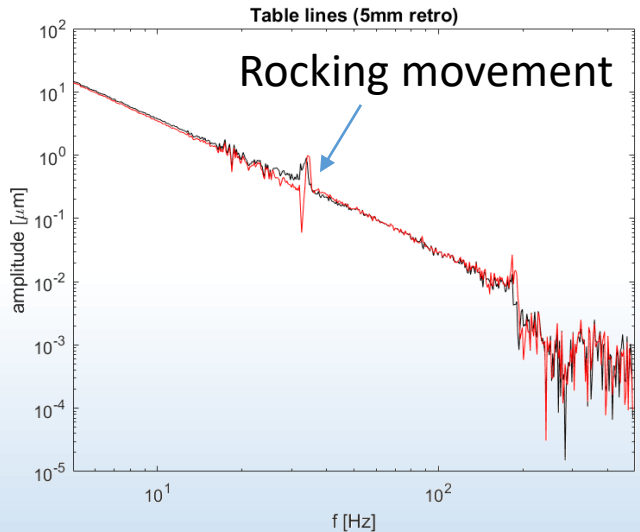
Status

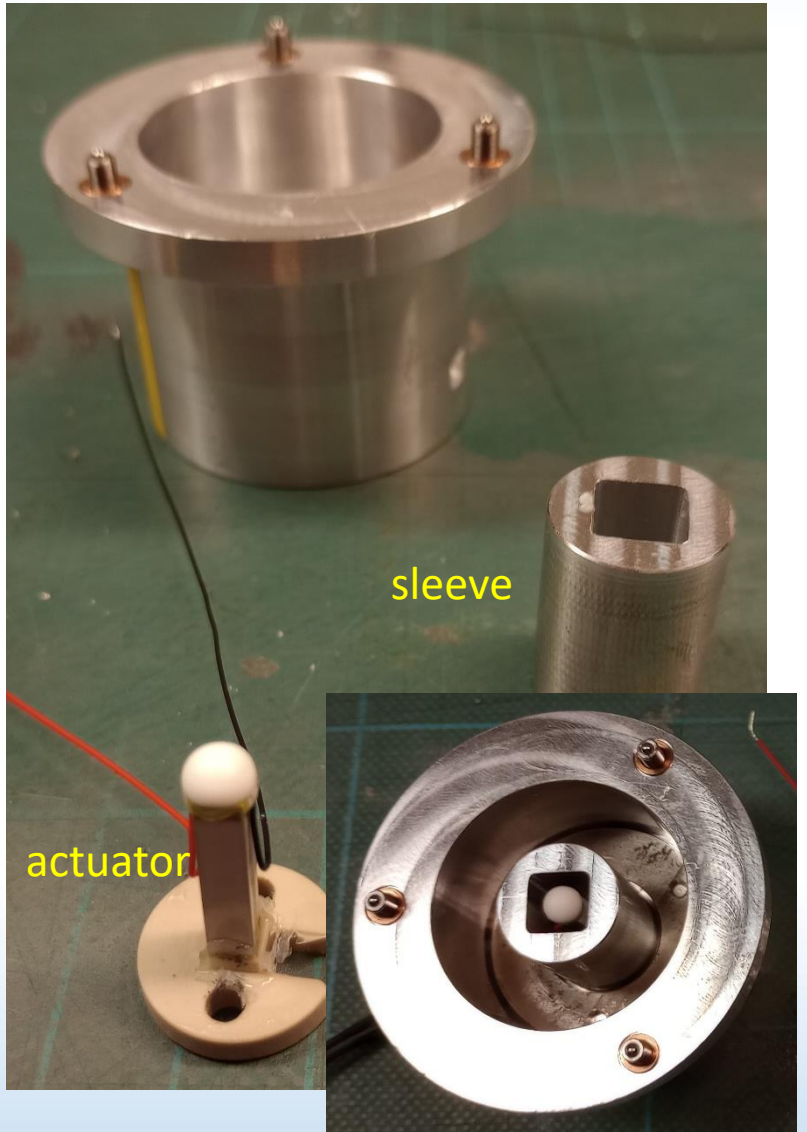
- Our AIDA PDRA disappeared in September
  - No notification, no documentation, no hand-over
  - We still have a few months of funding available, searching for a grad student who needs an extension…
  - In the meantime I have been taking over, trying to understand where he left things…
- Last thing he did was connect FSI system for 9 channels (out of 16 available)
  - 2 used for measuring table movement
  - 2 used for reflectorless FSI (AIDA deliverable)
- Activities during the past few months
  - New PC → new Labview → wouldn't work with our readout system → procured new system → DAQ needed modification – this is now complete and working
  - Can run the system now and replicate previous results

New vibration table actuators

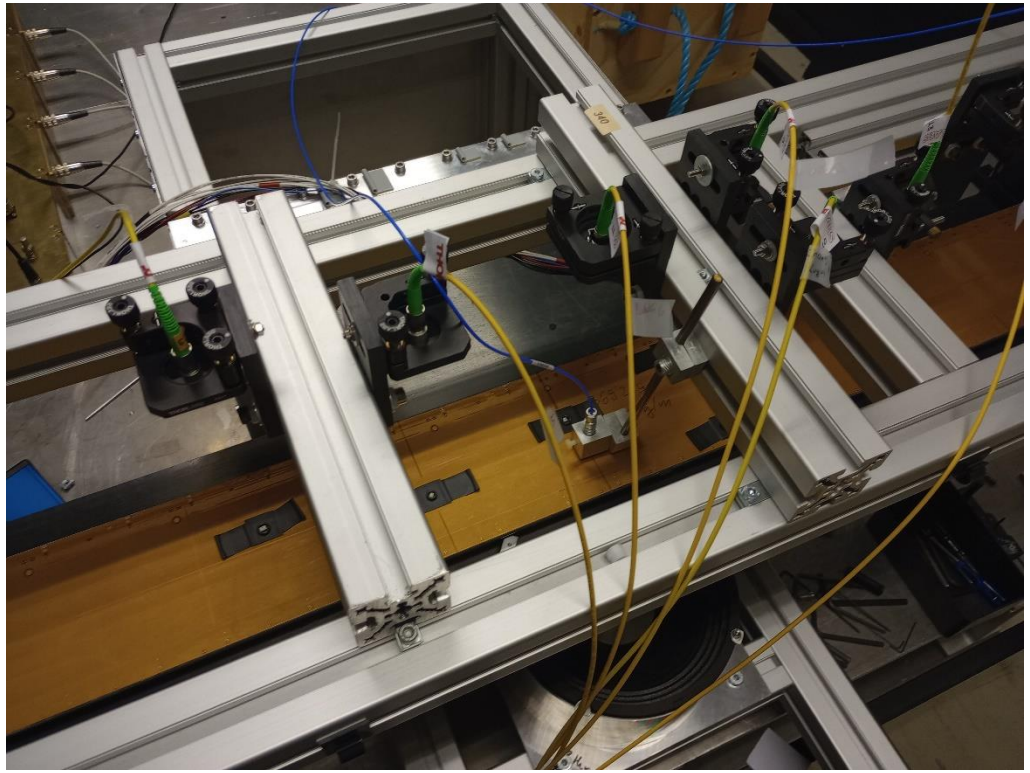


- Replacing vibration table excitation (speaker → piezo actuator)
- Reason is that speaker works for excitation (force), but it does not hold the position (displacement)
  - This introduces movements where the DUT resonates
- 2 piezos (one for each end of the table, to control rocking motion)
- Piezos are preloaded by a magnet
- First test showed that it works in principle, i.e. we get sinusoidal excitation with expected amplitude
  - However, pre-load was too strong - one actuator cracked
  - Improved side support with sleeve and silicone filled gap
  - Will try out when back in Oxford

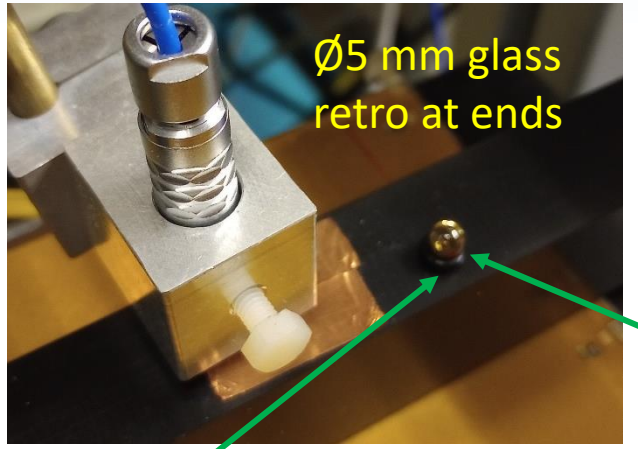


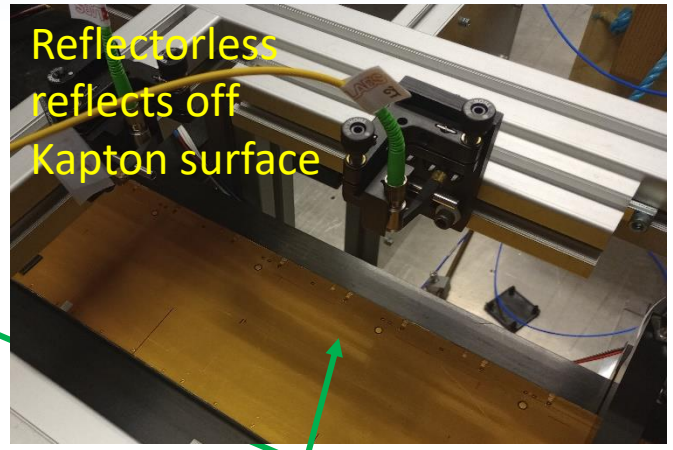


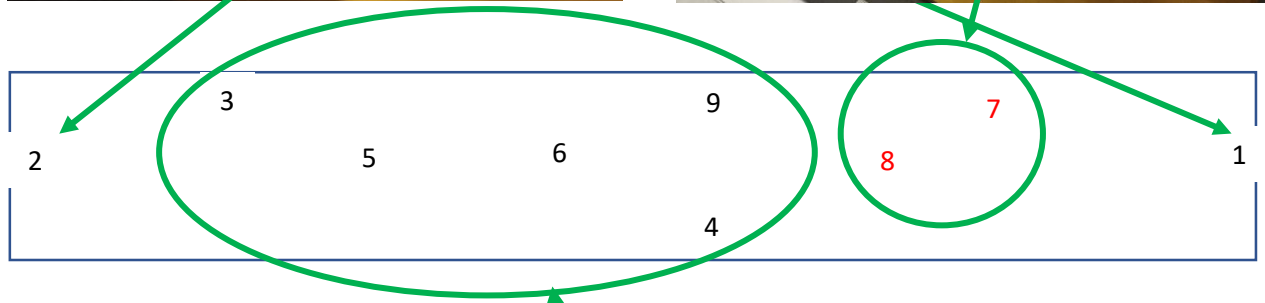
Current setup



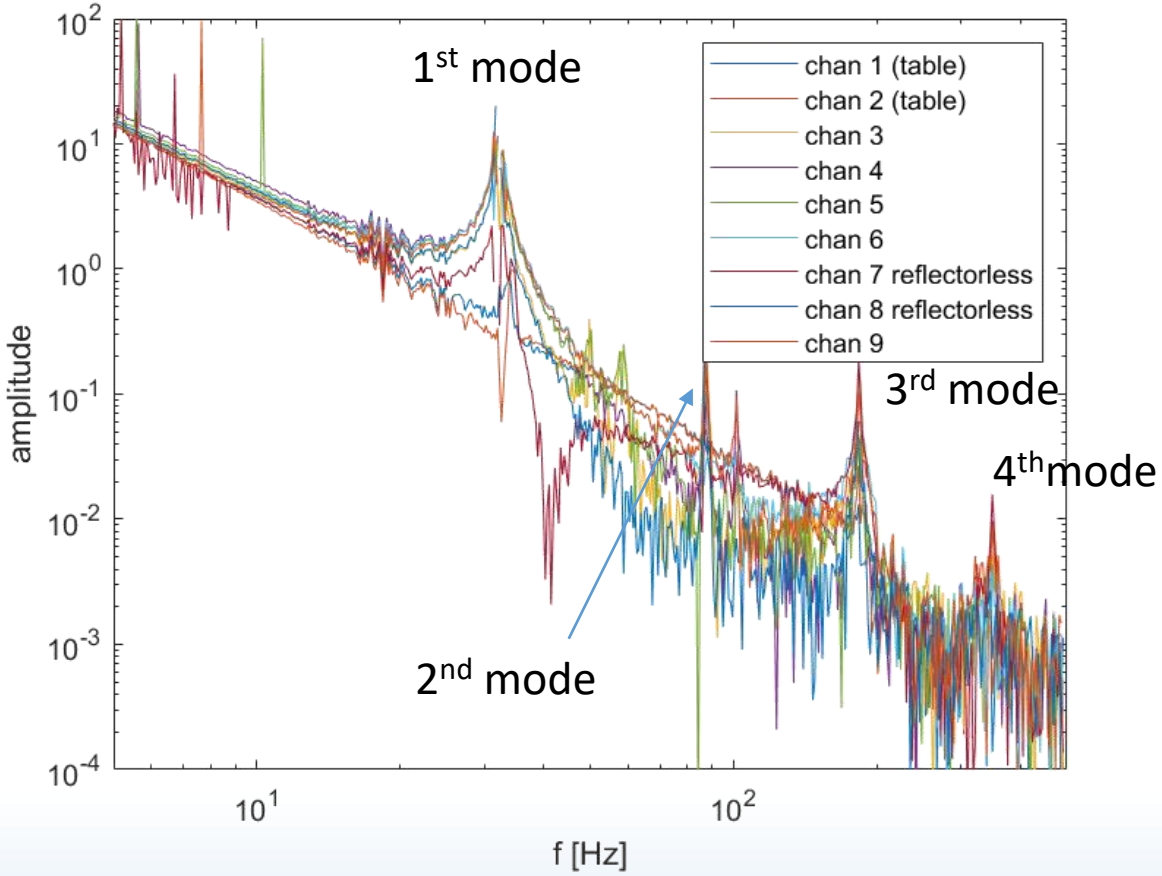
DUT is an ATLAS stave prototype (CF sandwich with Kapton/Cu tape co-cured to skin

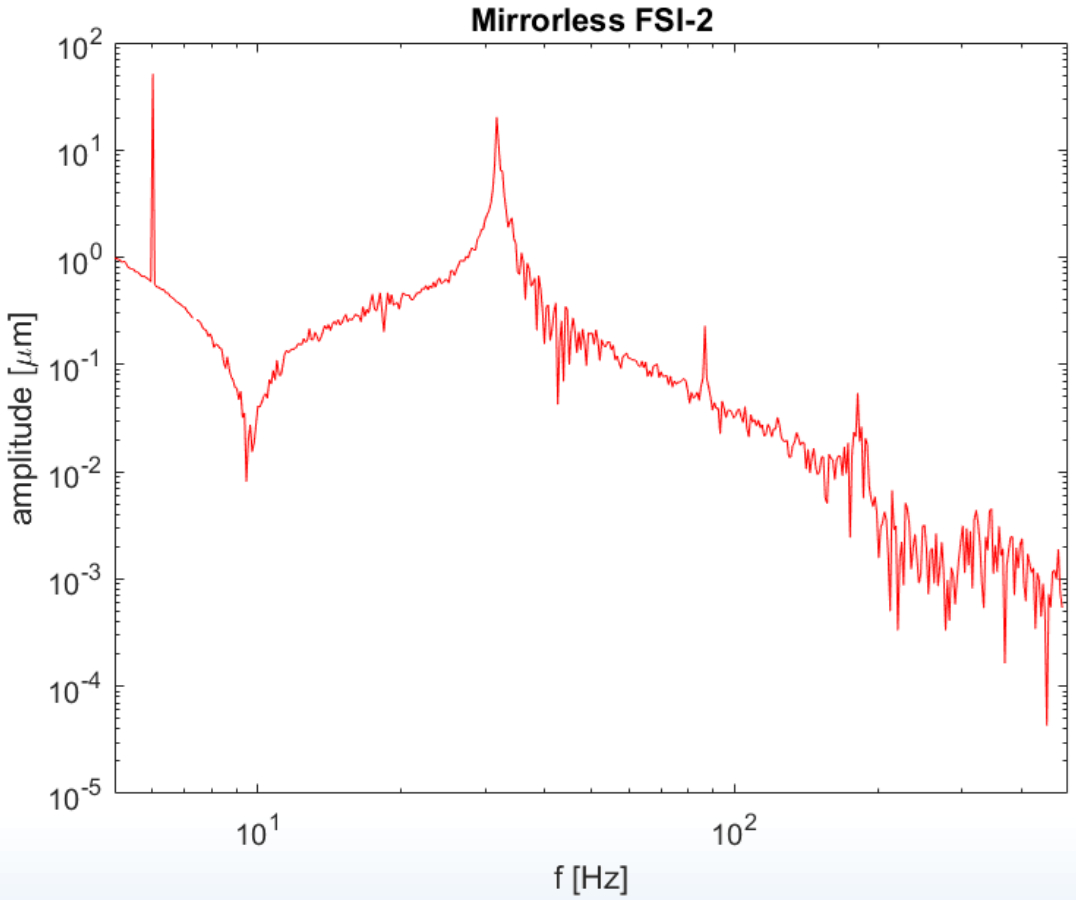






Outputs





Even modes should not be excited, but are (at lower level) due to incomplete control of displacement