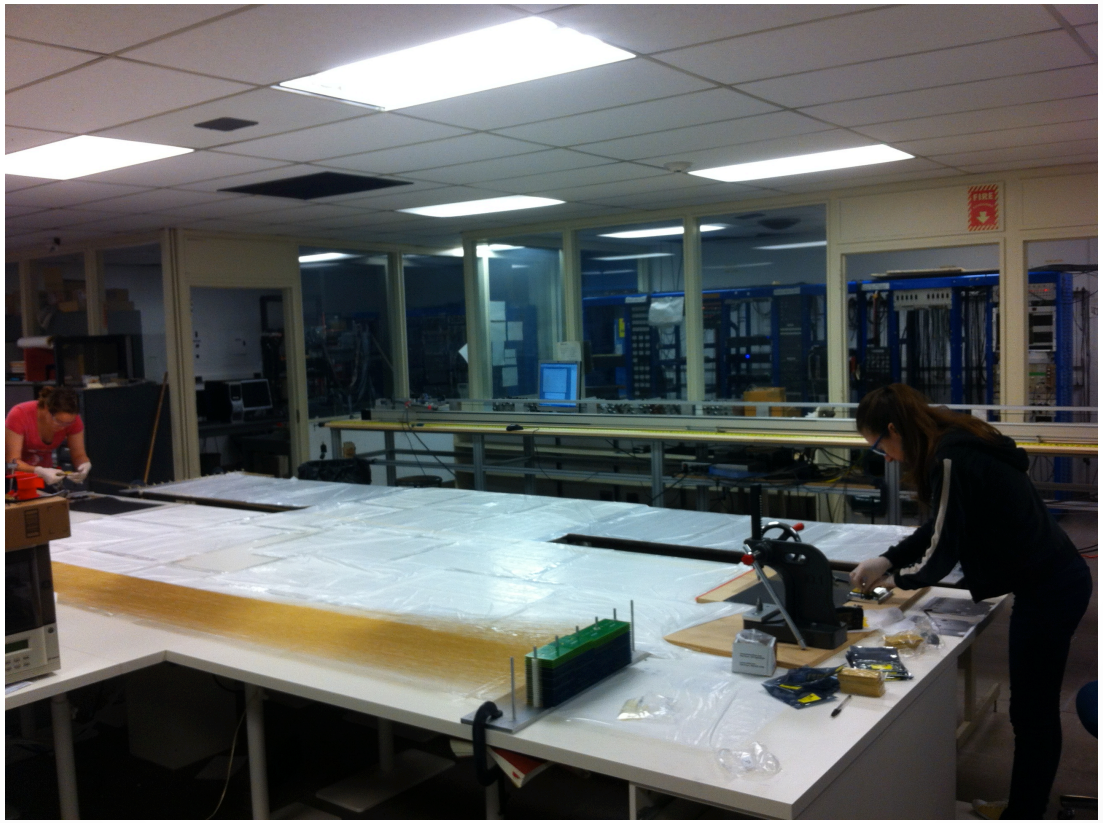
Update on wire winding at Yale

Corey and Roxanne

Wire winding machine status

- May 23rd the machine was ready for FULL operation



A wire winding team hard at work

Wire winding progress

- 2 shifts of 6h per day -> 7 days a week
- Teams: Andrzej, Ben, Bonnie, Christina, Corey, Flavio, Kinga, Roxanne
- Average of 8 boards per shift (x2 shifts per day)
- Estimation of finish date: June 20

Plane	Quantity to do (DONE)
U 4.8m wires (horizontal frame)	66+12 = 78 (78) ✔
V 4.8m wires (horizontal frame)	66+12 = 78 (21)
U var. lengths (horizontal frame)	42+10 = 52
V var. lengths (horizontal frame)	42+10 = 52
U short wires (vertical frame: R and L)	2 X (42+10)
V short wires (vertical frame: R and L)	2 X (42+10)

New "issue"

- By chance, we discovered that the wire "elongate" under the 2.5kg tension during the tension test
- Note that from specs and from tests, the yield load is 3.7kg (well above the test tension)
- From tests: 5m wires elongate ~1mm and 2.5m about 2.5mm
- One the wire winding is done, we will perform detailed tests on this to see how linear the elongation is vs the wire length and tension strength
- With these results we will be able to adjust the tension in the TPC once the wires are install to account for the deformation…