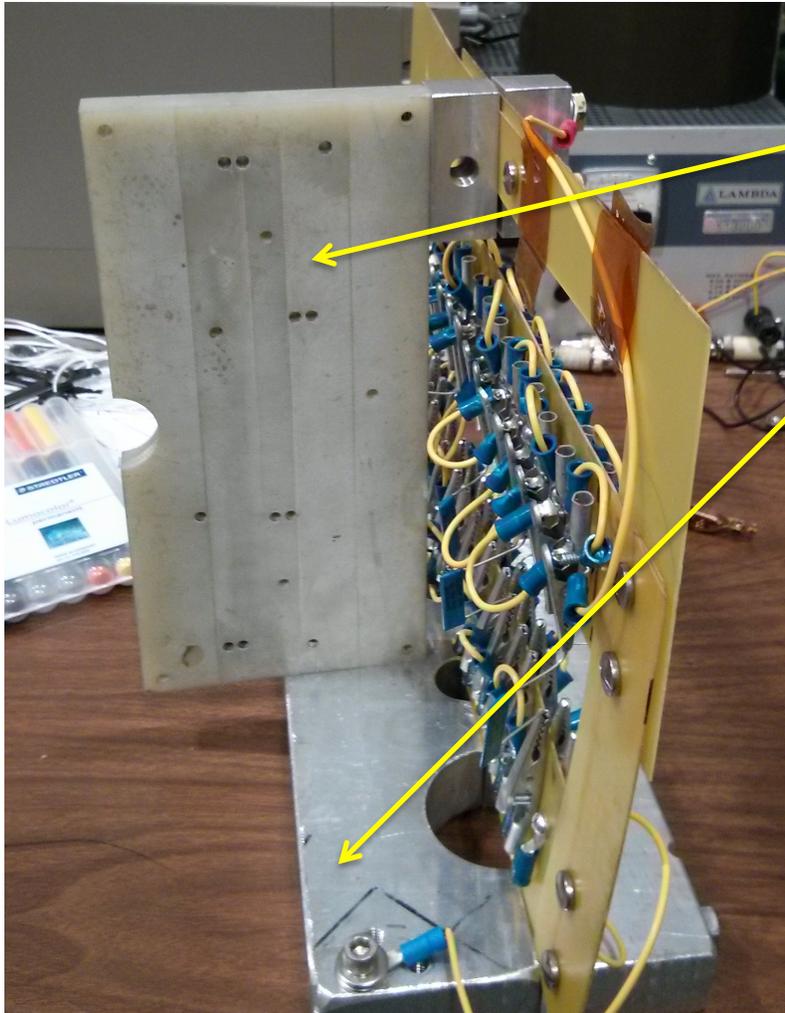


Slim Mox high statistics test

Anne, Donna, Thomas, Jen, Hans, Sarah,
Roberto, ...

Tuesday, April 15

Modified the test device on Friday with Hans



Stabilized with G10

-> full weight of FT can go on device

-> Better electrical contact

Rounded edges

Sparking is gone!

Newest test results

Batch 5 (Friday)

Only placed 11 resistors. (2 free spots in between) -> $V_{res} = 0.55 * V_{glass}$

Ramping up in 10 kV steps. 10 Pulses each voltage.

Sparks and resistor destruction at 100 kV (corresponds to ~55 kV at resistors) -> $V_{res} = 0.40 * V_{glass}$

Placed the next 21 resistors.

Ramping up in 5 kV steps. 10 Pulses each voltage.

Sparks at 135 kV (corresponds to 52 kV at resistors). Power supply tripped.

5 Slim Mox broken at 52 – 55 kV (mostly neighbored)

Batch 6 (Monday)

60kV 0.51mA, 80kV 0.72mA.

110kV 1.01mA - sparkish sound, several not very strong sparks - Resistor 1 broke (observed by Hans). Resistor 18 has broken encapsulation and infinite resistance.

130kV 1.2mA, 140kV, 150kV - clear sparks and trip (10 pulses each voltage).

2 Slim Mox broken at 33 kV (opposite)

Batch 7 (Monday)

In 20 kV steps till 80 kV, 10 pulses each. In 5 kV steps till 135. 10 pulses each.

50 pulses at 140, 1.3 mA. 50 pulses at 145, 1.4 mA. 50 pulses at 150. GUI crashed, voltage stayed for < 10s on Glassman. Many sparks.

Resistor 17 has cracks and measures lower resistance.

1 Slim Mox broken at 45 kV