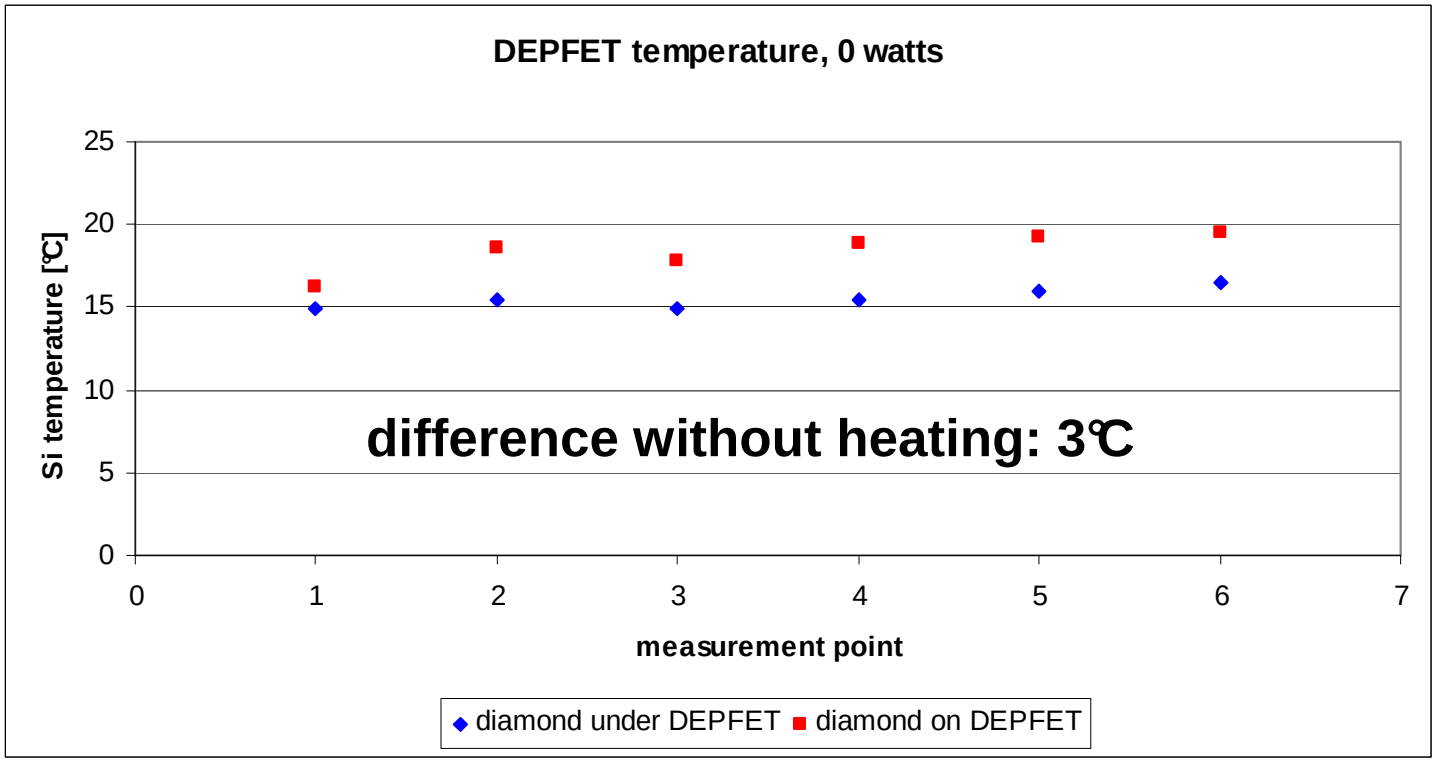
# DEPFET cooling

## Belle II PXD EVO meeting
## 25.08.2009


Institut für Experimentelle Kernphysik

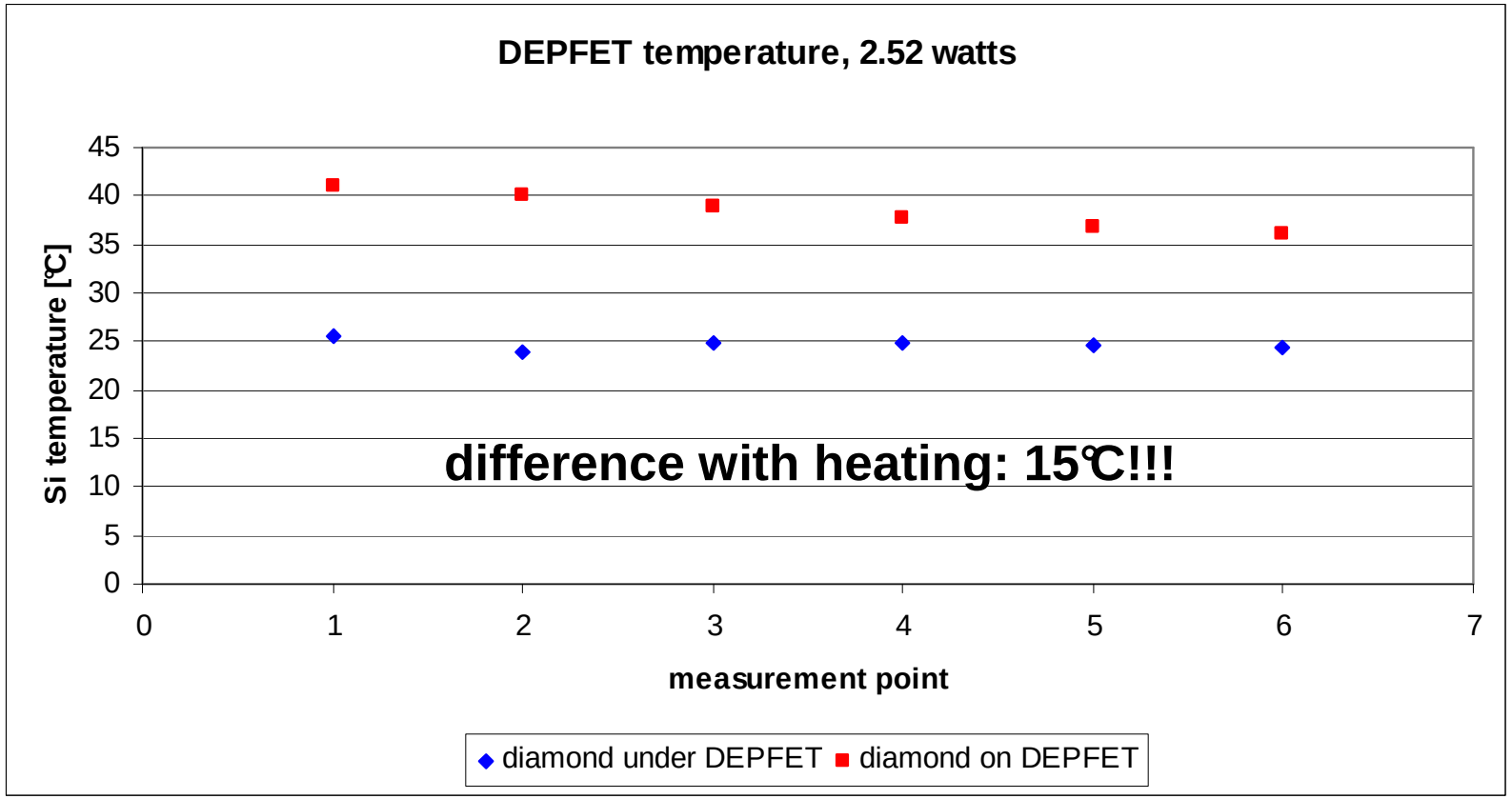
# 1. measurements

- moved position of diamond to upper side of DEPFET
- new covered area: 48 mm² (=37,5% of old setup)
- ***no*** TPG-foil



# 1. measurements

- only results for low power (2.52 watts)
- problems with glue: temperatures too high, DEPFET seperates from diamond



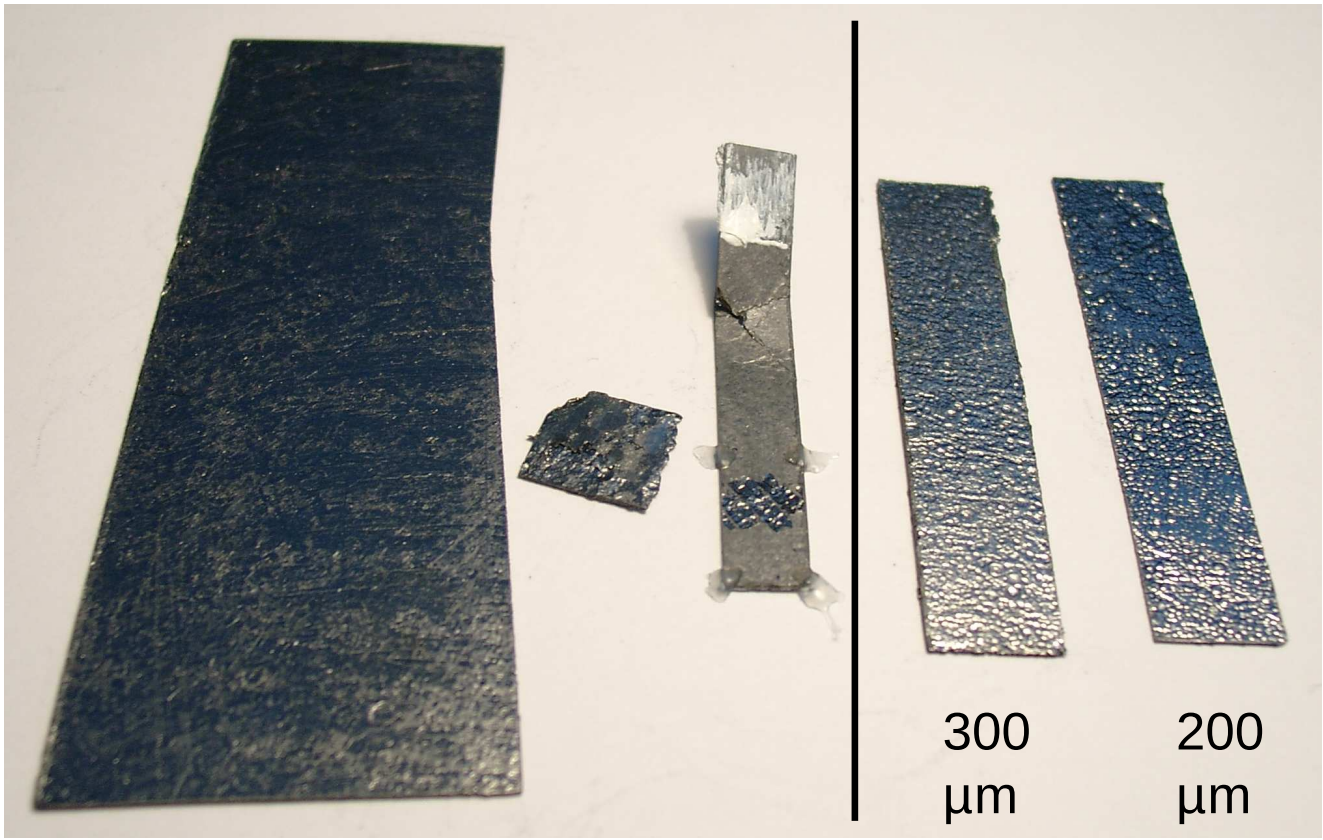
# 2. results

- even at low power the difference is already 15℃!
- difference higher than expected?
- new measurements with different glue will be done for better comparison
- then the TPG-foil must be applied…

# 3. TPG-foil

- the TPG-foil Munich proposed as a heat bridge between chips and diamond has arrived
- it‘s like normal TPG-material, only thinner

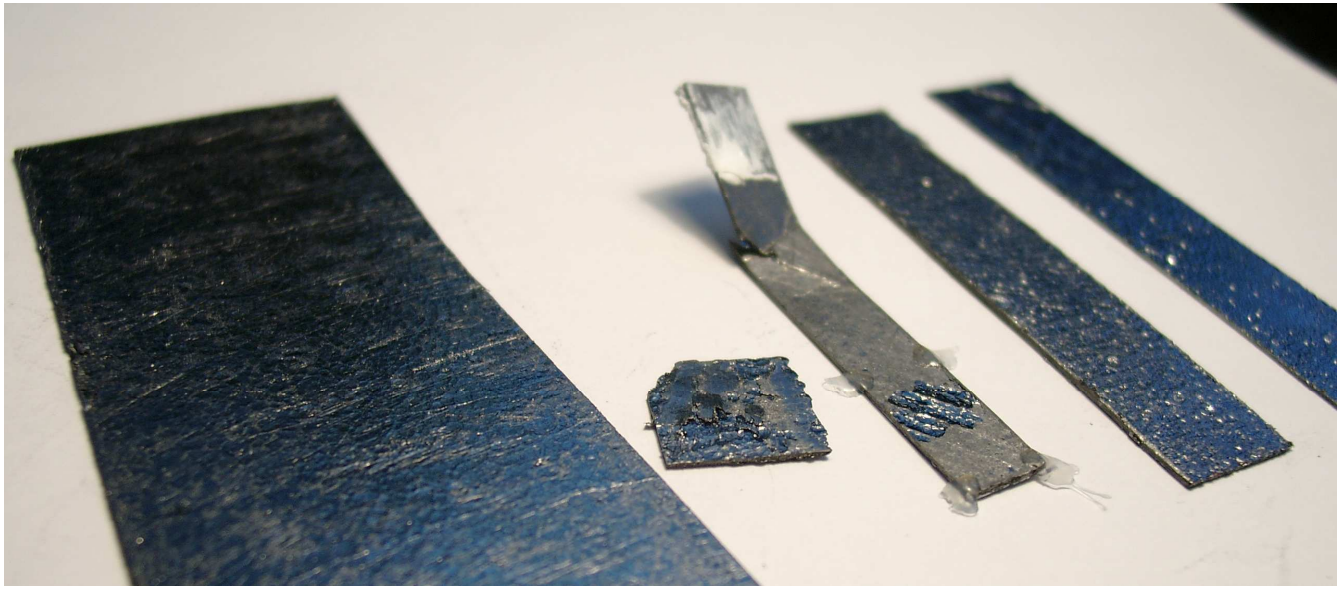
TPG from Munich (500 µm)




TPG-foils from Optigraph

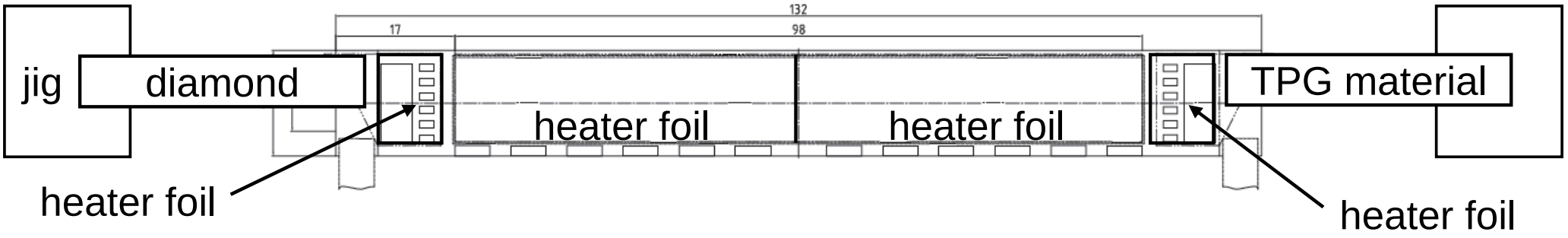
# 3. TPG-foil

- no difference between TPG and TPG-foil!
- same problems with mechanical stability and moldability
- producing a curved surface is difficult



# 4. new setup in September

- build a new setup after some simple tests




- complete ladder for measurements with foil
- 2 new cooling jigs (to be manufactured)
- 4 heater foils (ordered)
- long Si-strip (available)
- TPG-material (available)