

Nikhef/Bonn LepCol meeting May 22, 2018

Status Laser Setup

New DCS PC being installed

- Existing DCS PC was old (>> 5 y) and unreliable
 - C drive full
- Most components are installed and operational
 - HV control
 - Gas flow control
 - Stage control not yet fixed

But a few flaws:

- Laser on/off switch
 - Existing PCI DAQ unit outdated
 - Replaced by DAQpad-6015
 - Does not have a driver for W10 64 bit
 - USB-6211 ordered
- Humidity sensor cannot be read out
 - .NET Framework 3.5 cannot be loaded
 - For CT to solve
- O2 meter still in repair
 - Promised to arrive today

Status Laser Setup cntd

Having problems with liquid cooling

- Aluminum cooling plate
- Debris from corrosion blocks coolant flow after one day
- Adding car antifreeze does not help
- Now trying pure glycol
 - Lasts for at least 4 days
- HV tolerance of QUAD still fine
 - Default at -300 V grid
 - Running at -330 V
 - Current ~ 1 nA or less
 - No current instability or sparking



New QUAD production

- Mechanics for one QUAD produced
 - Strongly reduced stump
- Dedicated storage boxes ordered
 - Antistatic poly carbonate
- But waiting for
 - Wirebond board (15 ordered)
 - Initially promised on April 18
 - Now delayed to June 8
 - Failure due to underetching
- Oscar on holydays until ~July 5
- Finally good news from Yevgen
 - Problem with SiN deposition machine just solved
 - Starting today with producing InGrids on TPX3 chips

So we might have a new QUAD on the end of July at the earliest

