Photodiode Calibration Setup

Cheuk-Ping Wong

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HRPPD QA Setup

- Reference photodiode is used to correct for the fluctuation of the light source

- Each test station across the pfRICH working group will receive a photodiode calibrated at BNL
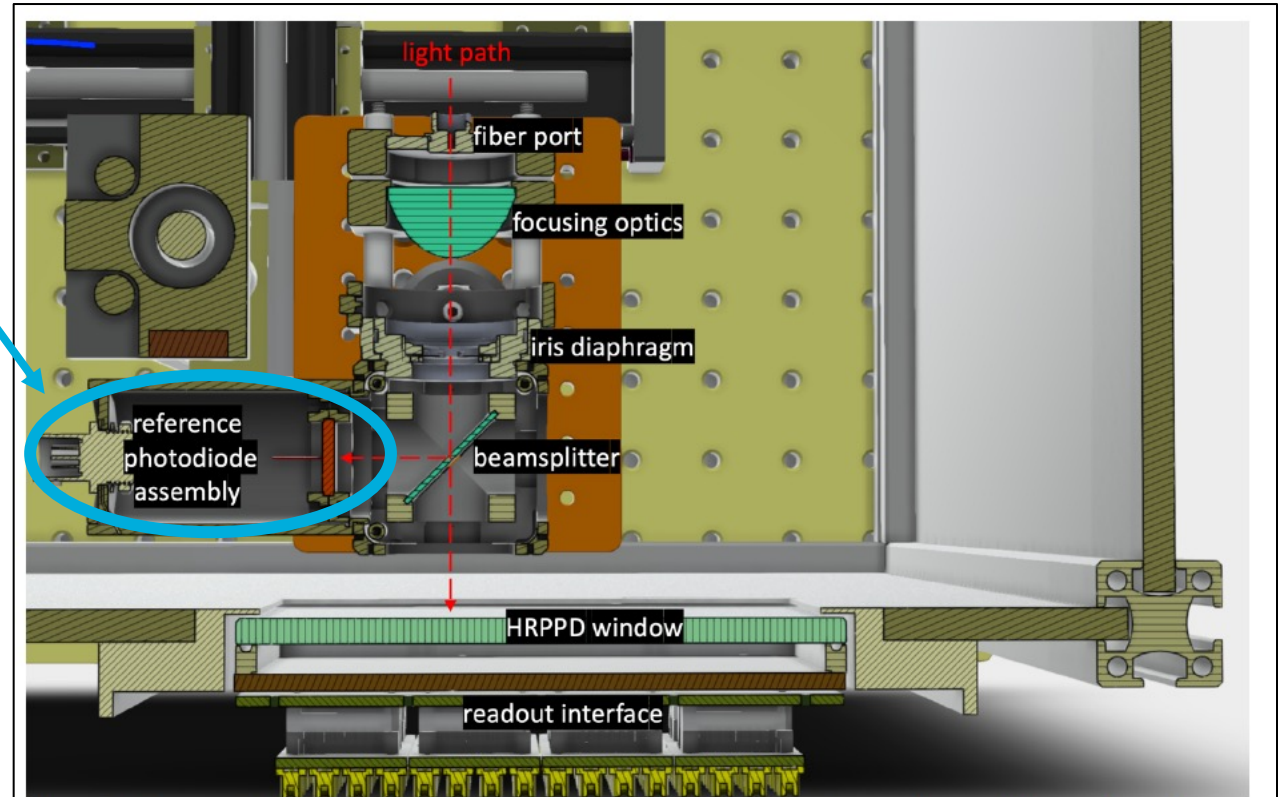
HRPPD QA setup

Figure 2 A crosscut of the optical head (top view), with a focusing lens, a beamsplitter and a reference photodiode mounted on a movable table. An HRPPD assembly with a 4x4 array of small 16ch MCX interface boards is seen at the bottom of the picture, mounted on a side wall.
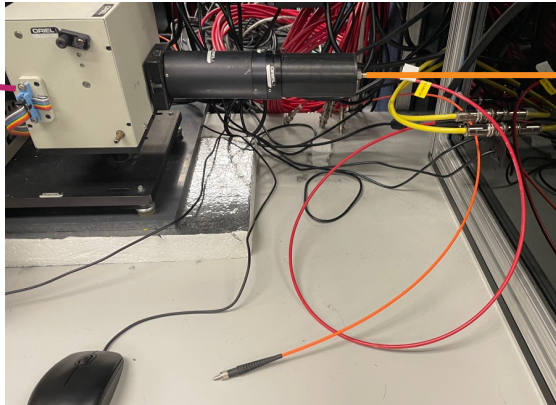
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Photodiode Calibration Setup at BNL

On the other side of the bench

picoammeters

Power supply

monochromator
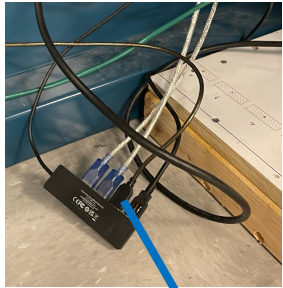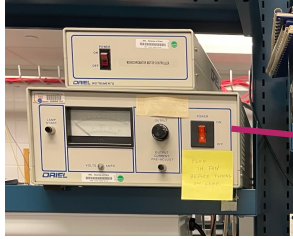
Reference photodiode

photodiode

Light source

spitter

Reference photodiode
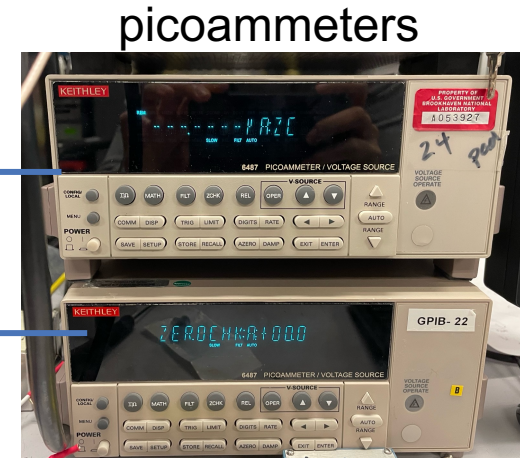
photodiode

Quick test (w/ filter)
- Room lighting: ~10nA
- + Laser pointer: <1µA

USB hub connected to eic@lappd

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Todo List

❑ Modify run scripts
   ❑ Double check the bias voltage. It should be zero for photodiode calibration
   ❑ Light source beam size =1mm
   ❑ Modify scan range (xyz) – see SurfaceScan.C

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