update on BRTF measurements

pab gonio–photometer II

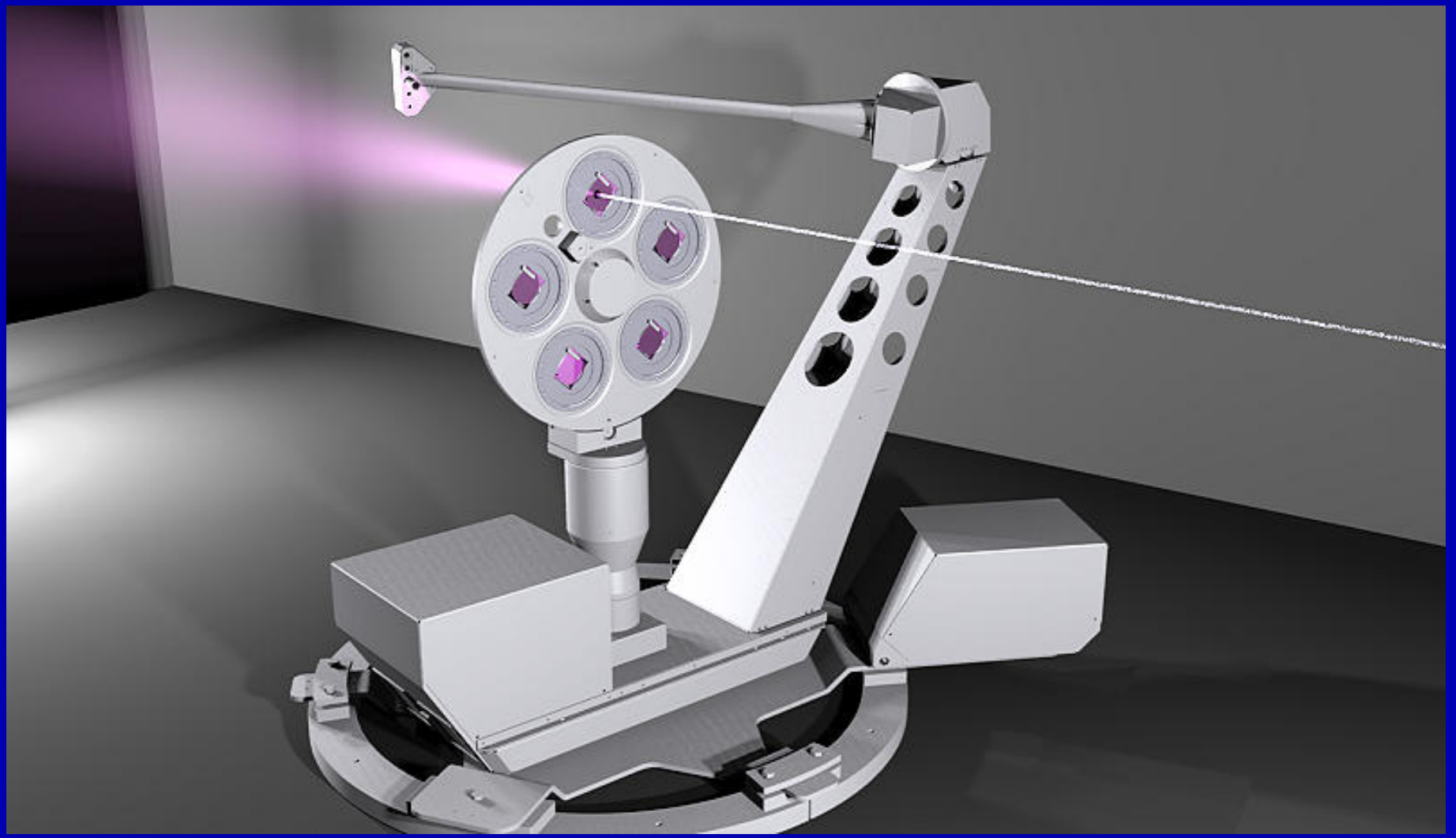
Dr. Peter Apian–Bennewitz

www.pab.eu

www.brtf.info

pab gonio–photometer II

measurement of light scattering (BRTF) and lamps



pab photo–goniometer II

advantages:

servo drives & control	increased speed higher precision
arbitrary scan paths	faster measurements
15 years BRTF experience	optimized design
Linux controlled	direct coupling of signal and position
modular design	adaptable to special needs

please find more information at http://www.pab–opto.de/gonio–photometer

pab–goniometer II news 2006

- enhanced signal/noise ratio of detector, higher dynamic range
- design of sample changer completed, incl sample RFID reader
- control of multiple light sources fully integrated
- switched from filesystem to database for BRTF data storage

pab gonio–photometer II

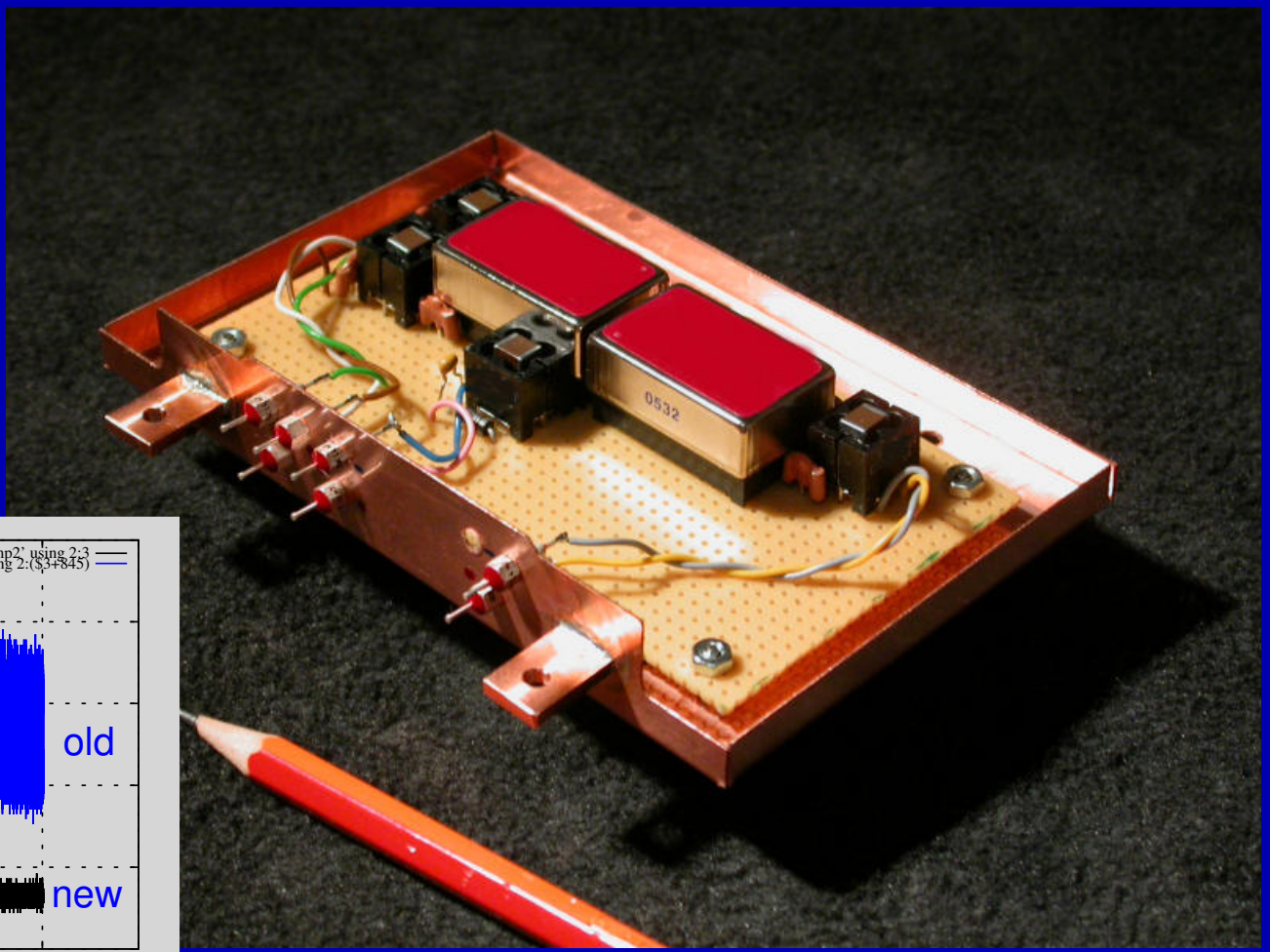
minor technical detail: prototype lamp control unit (USB interface)

pab gonio–photometer II

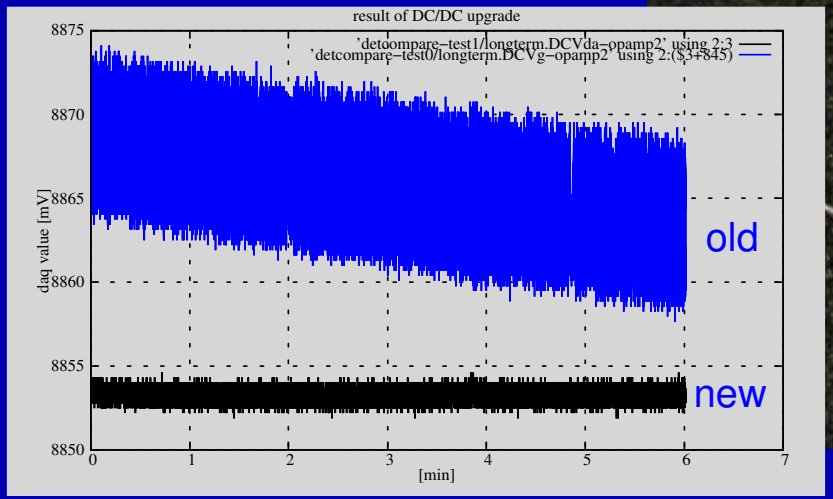
standard detector head (shielded, max 5 sensors)

pab gonio–photometer II

new minor technical detail: DC power without peaks

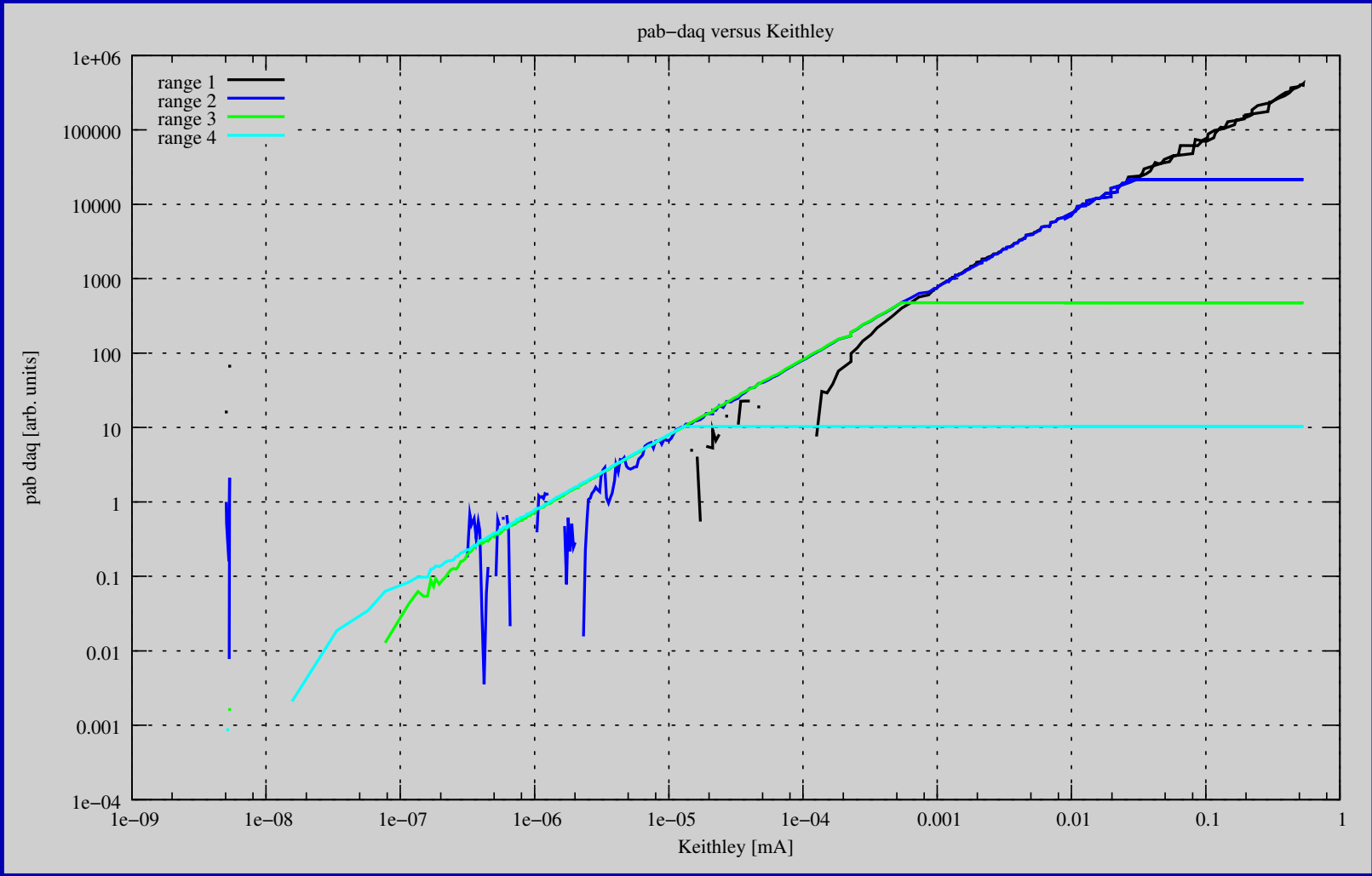


sensor signal:



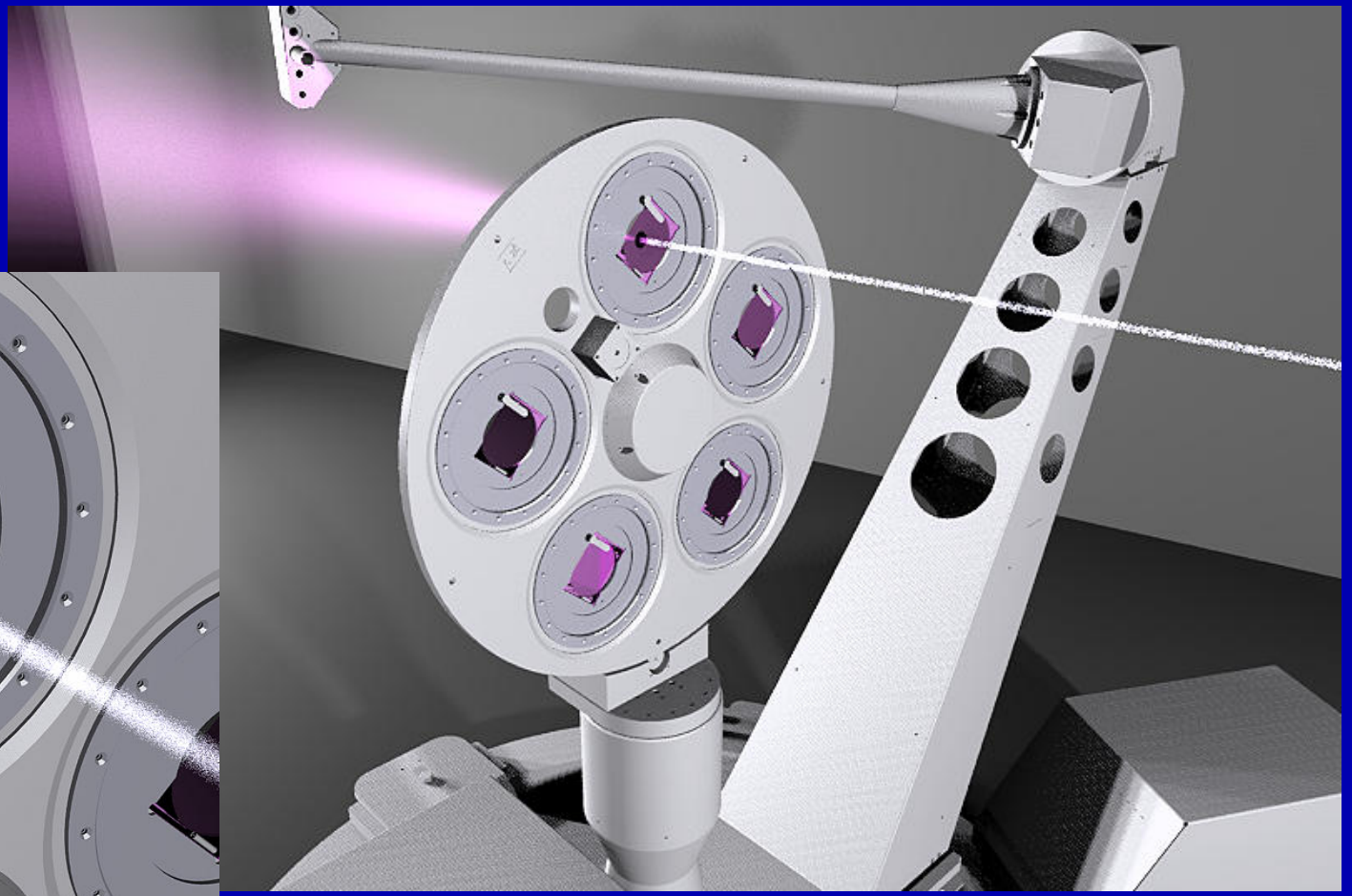
pab gonio–photometer II

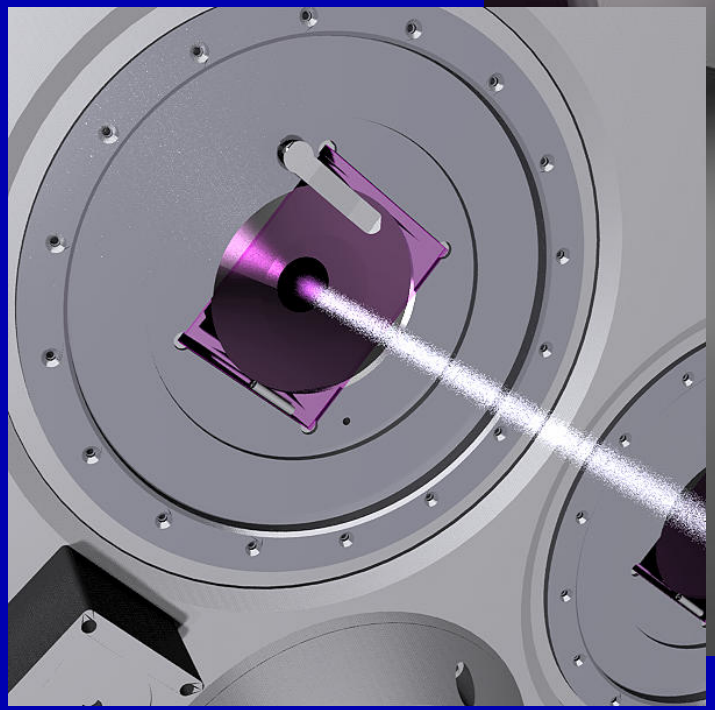
comparison with Keithley 6485 picoammeter



pab gonio–photometer II

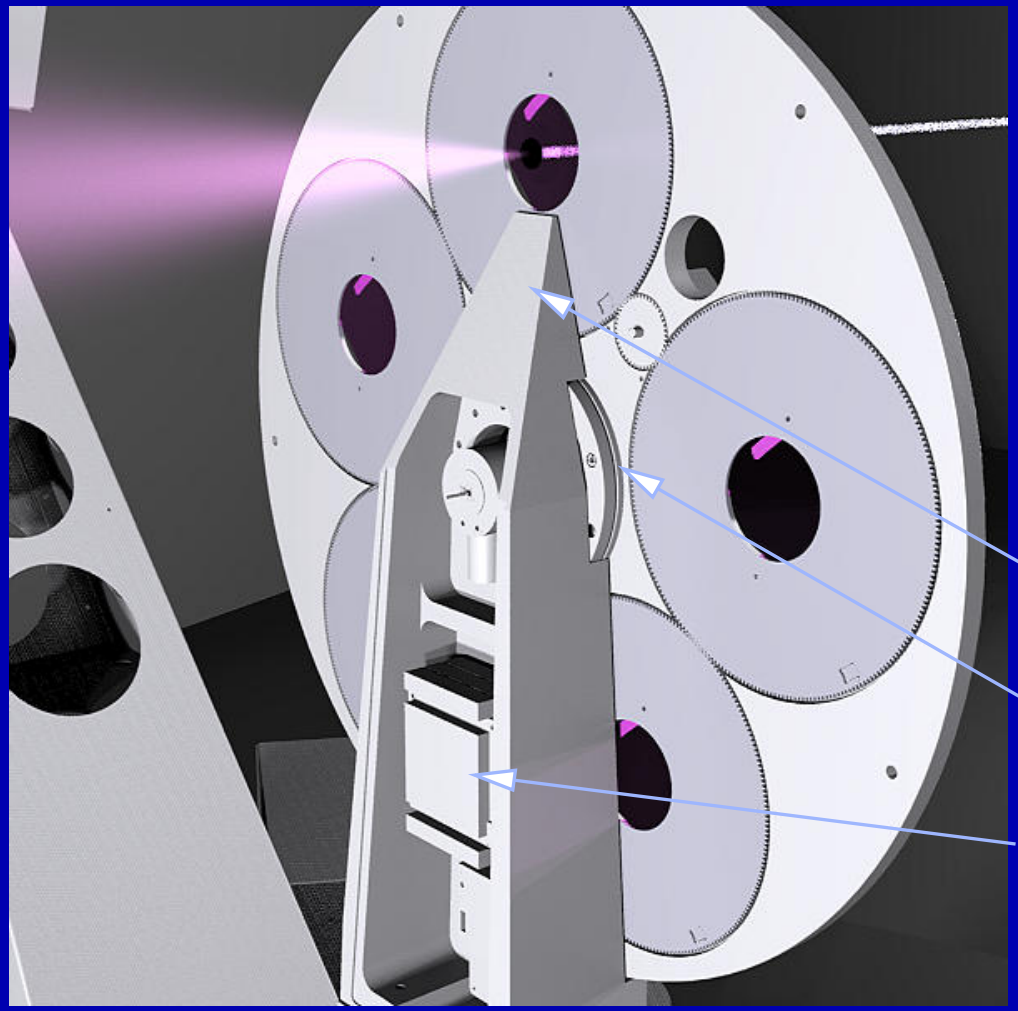
new: sample changer





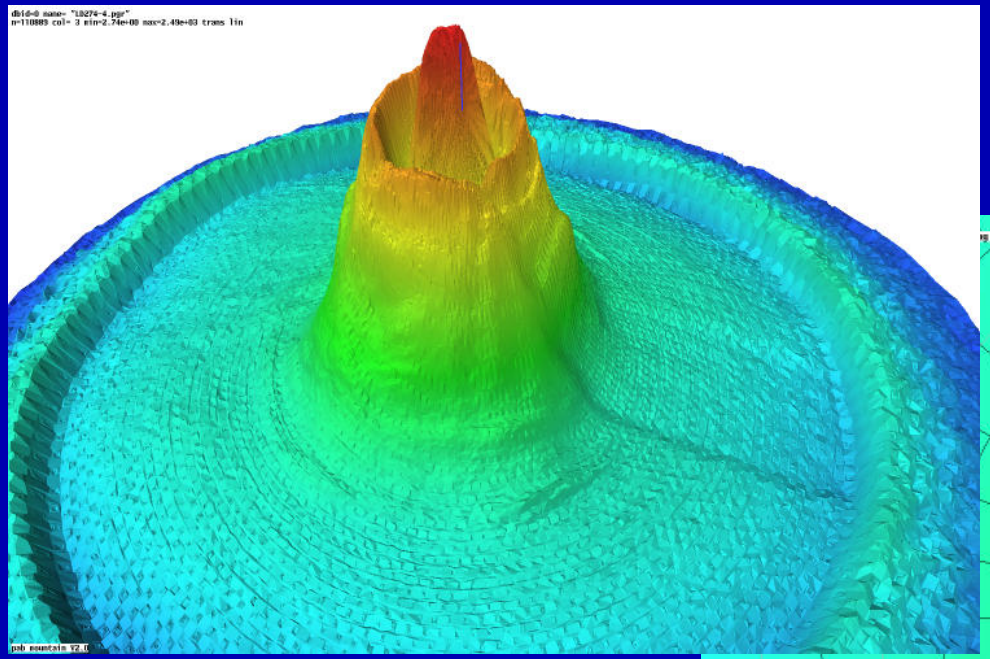
pab gonio–photometer II

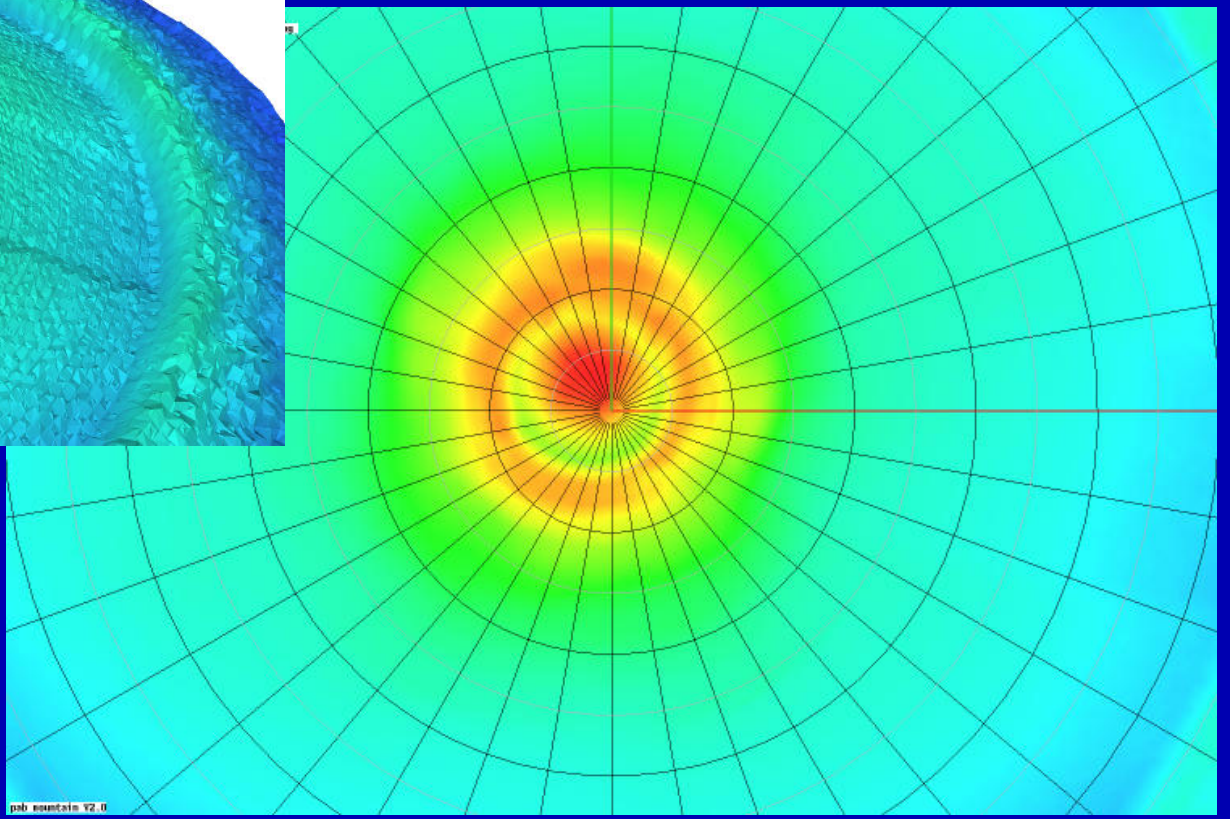
new: sample RFID, less self shadowing, larger samples



pab gonio–photometer II

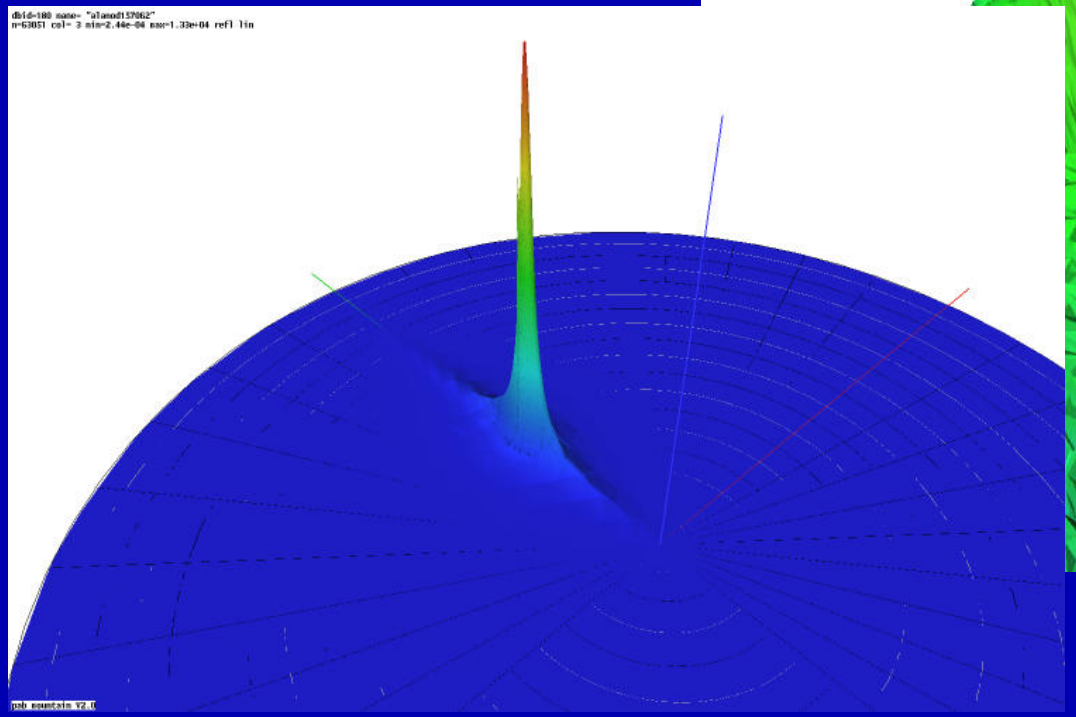
LED data (LD274)

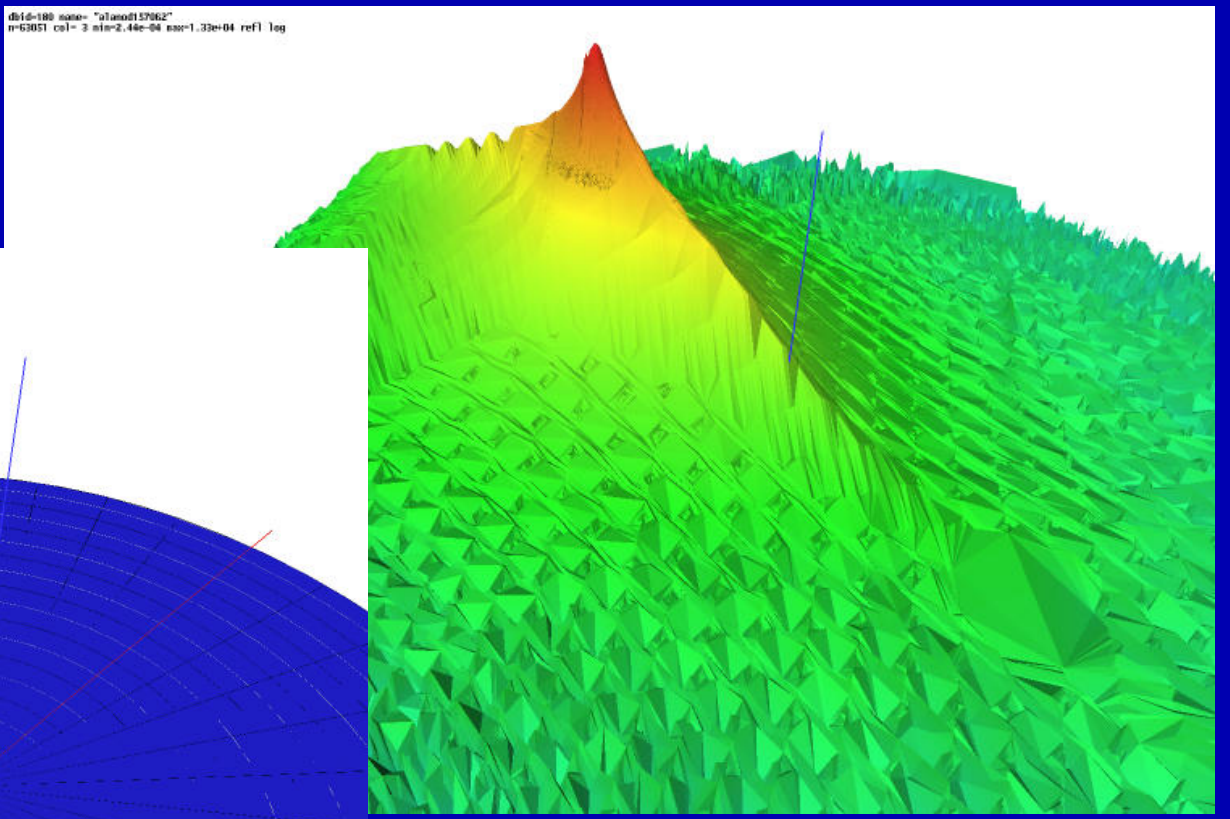




pab gonio–photometer II

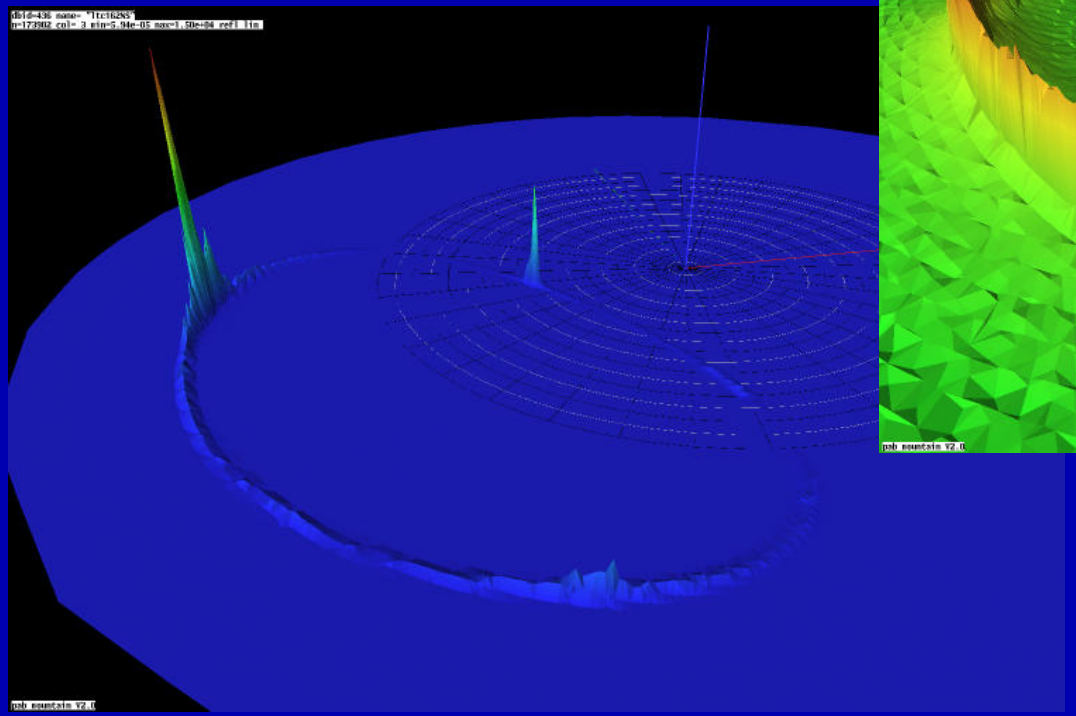
Aluminium data (Alanod 157062)

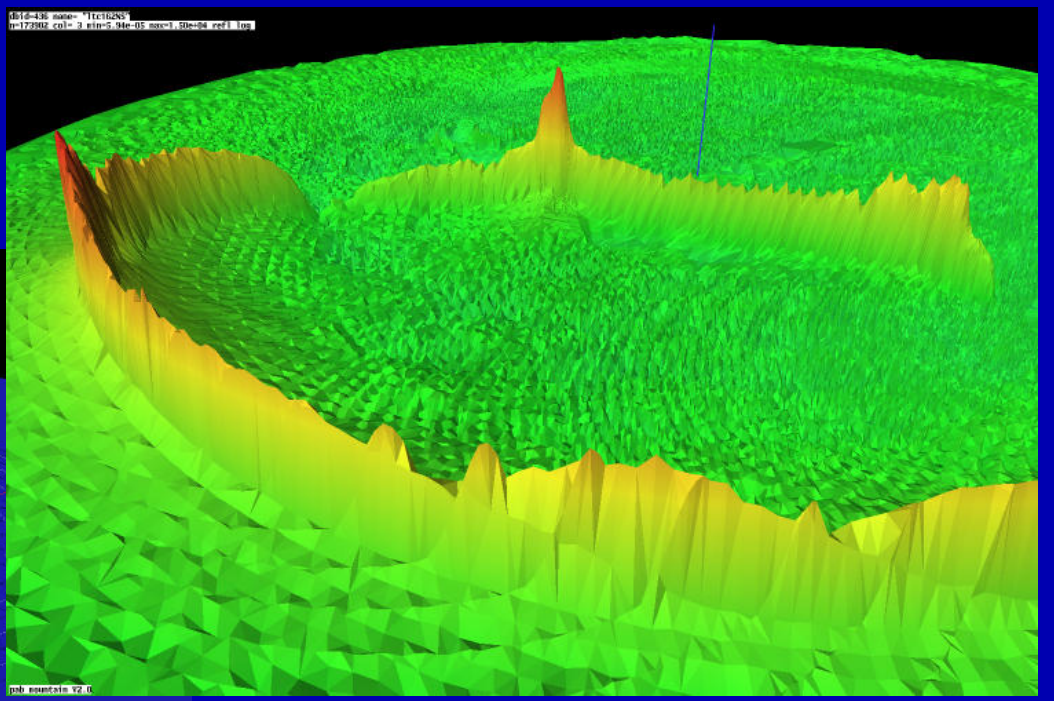




pab gonio–photometer II

roof material (Lexan Thermoclear)

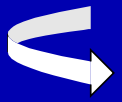




- many thanks for your attention
- happy rendering
- http://www.pab.eu http://www.pab–opto.de http://www.brtf.info

minor thoughts on Radiance ✳

- funding of current caretaking:
  - crossfunding (freetime funded by Radiance–based projects)
  - young enthusiasts (aka students)
  - add–ons funded in context of project



- no todo–list, no road map

✳ friendly thoughts, after enjoying it very much since 1991

minor thoughts on Radiance

- number of developpers ?
  - quality assurance & test–releases (technically no problem, but socially ?)
  - we may need software branches – will they mess up the release process ?
  - serious software contributors must be prepared to maintain their work (for years)
    - this is especially relevant to university projects (tutors, please take note)
  - funding (!)
- road map & transparent SW development
  - funding scheme needed for implementation of new features deemed 'urgent'
- documentation
  - community of primary writers/compilers estimated at 5–10 folks (per planet)
  - hierachical structure needed to insert and retrieve information
  - configurable responsibilty for contents (for a branch of the doc tree)
  - comments open to all (but clearly marked as such)

target: ease use, put Radiance on broader base