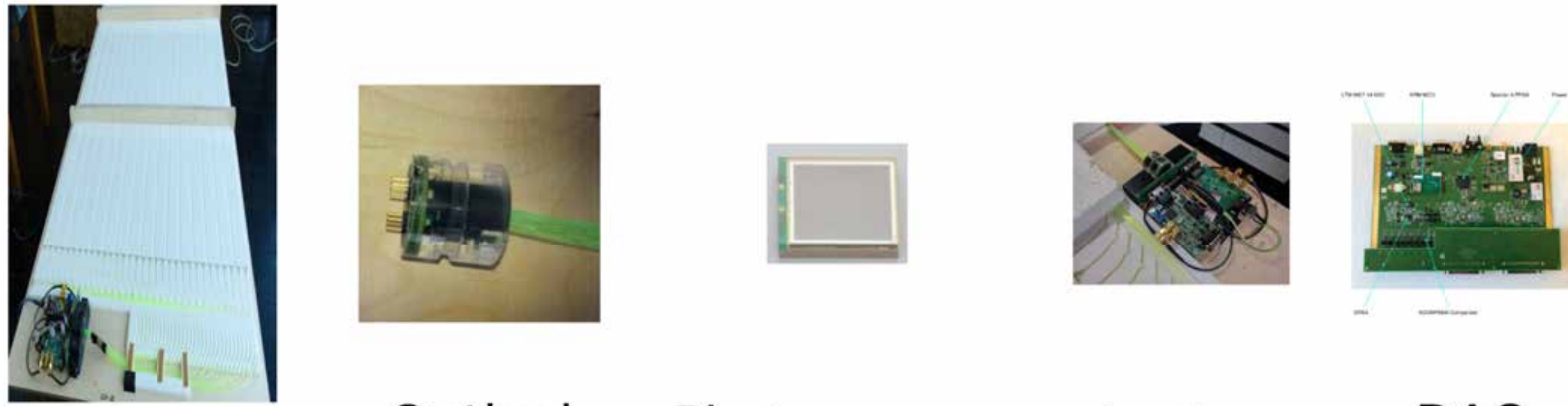


Scintillation detectors

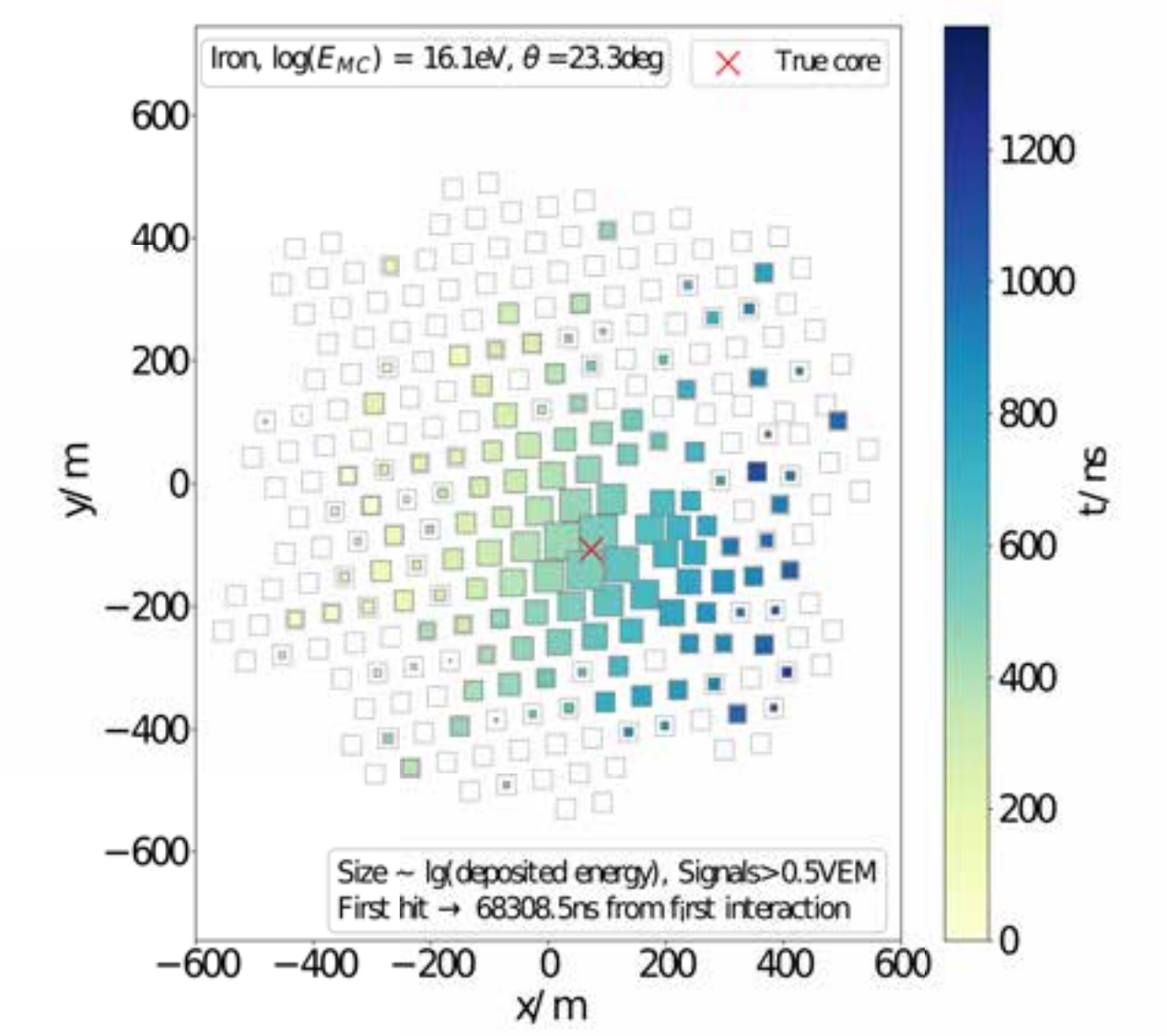
A prototype surface station for IceCube was developed and installed at the South Pole.



Scintillator → Optical Coupling → Photosensor (SiPM) → Analog Readout → DAQ System



Installed at South Pole



Simulation study for Gen2

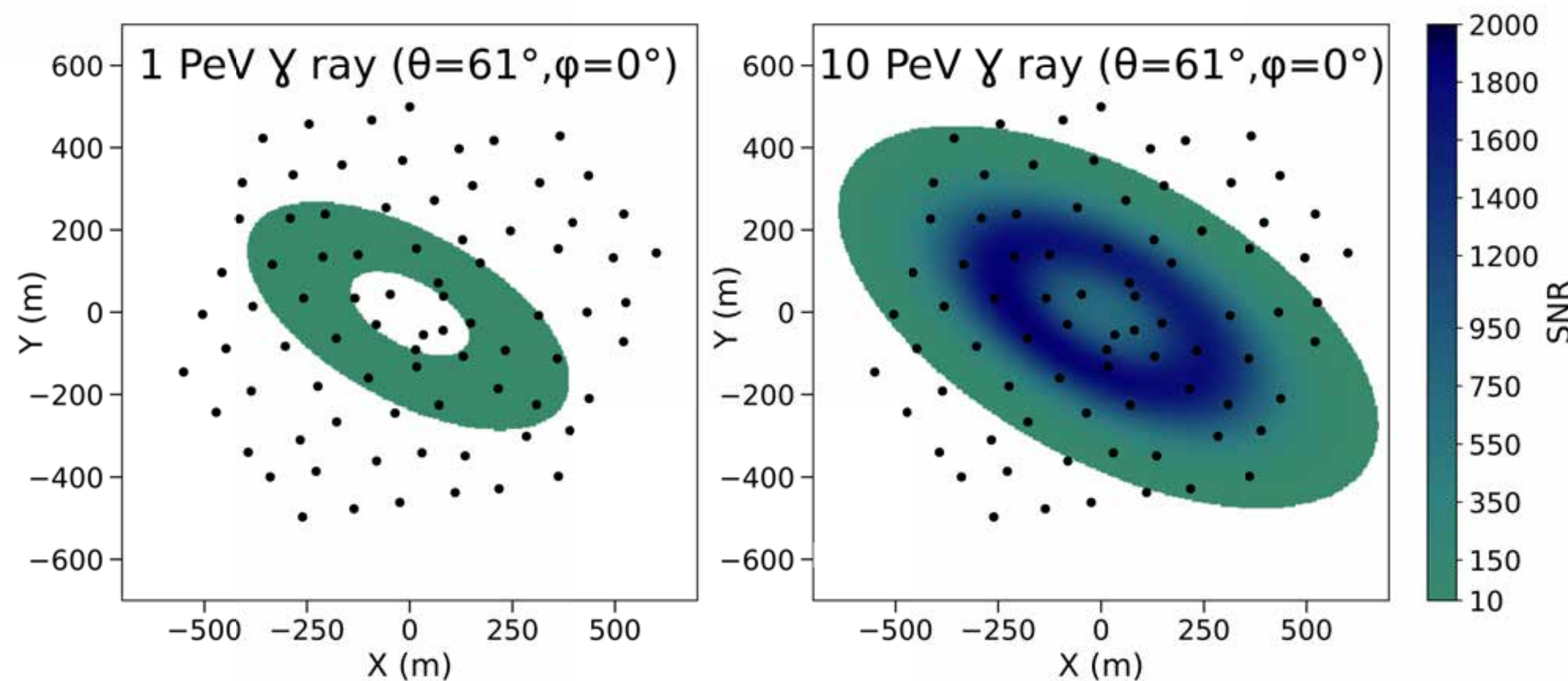
For IceCube-Gen2 a scintillation array with ~300 detectors is planned. [You can contribute with a thesis on hardware, data analysis or simulations.](#)

Radio detectors

Radio detection technique fits purpose of measuring PeV gamma rays at IceCube site.



Prototype at KIT



Simulation of PeV gamma ray from Galactic Center

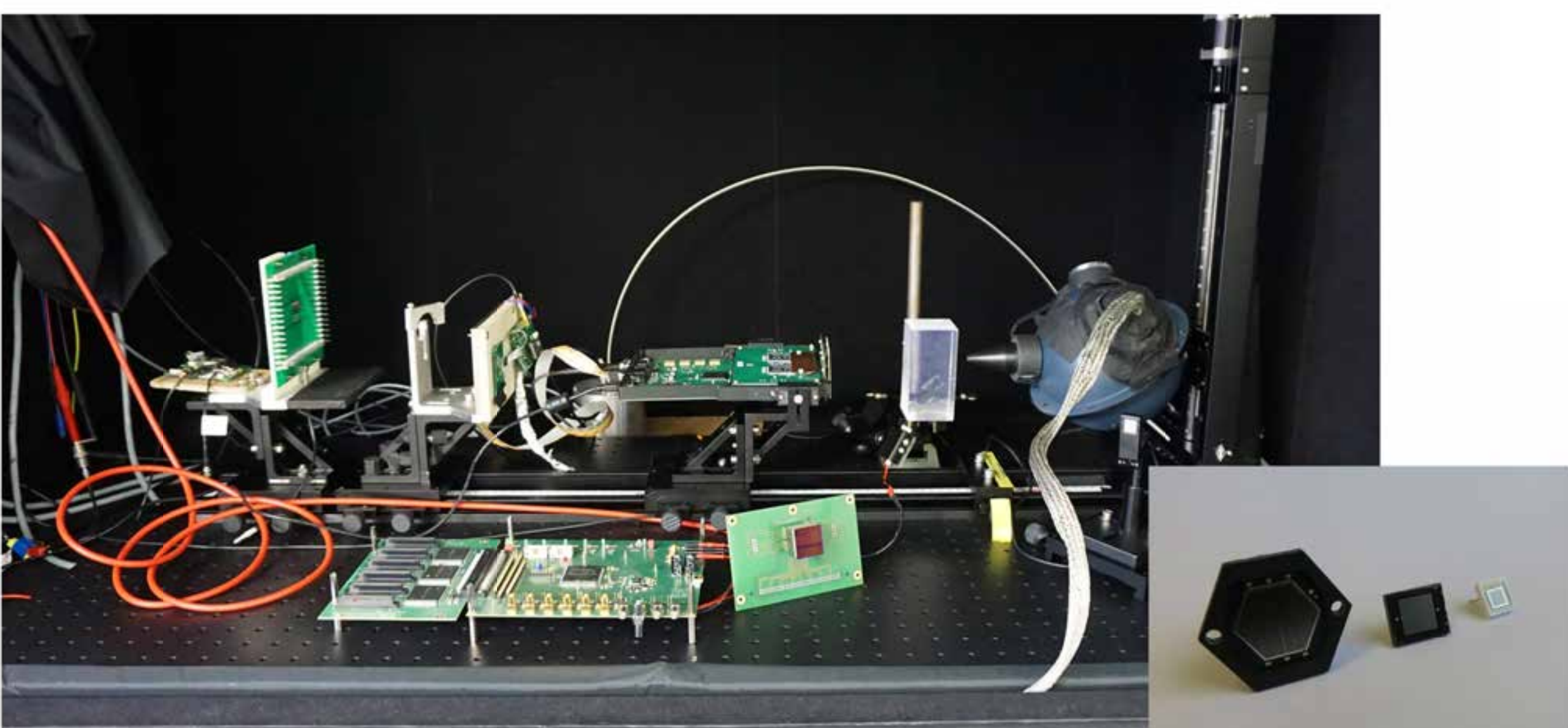


Installation at Southpole

Additional radio detectors can measure inclined air showers. Prototype stations from KIT are currently installed. [You can analyse first data and improve the electronics.](#)

SiPM R&D

Dark chamber SPOCK for photosensor measurements

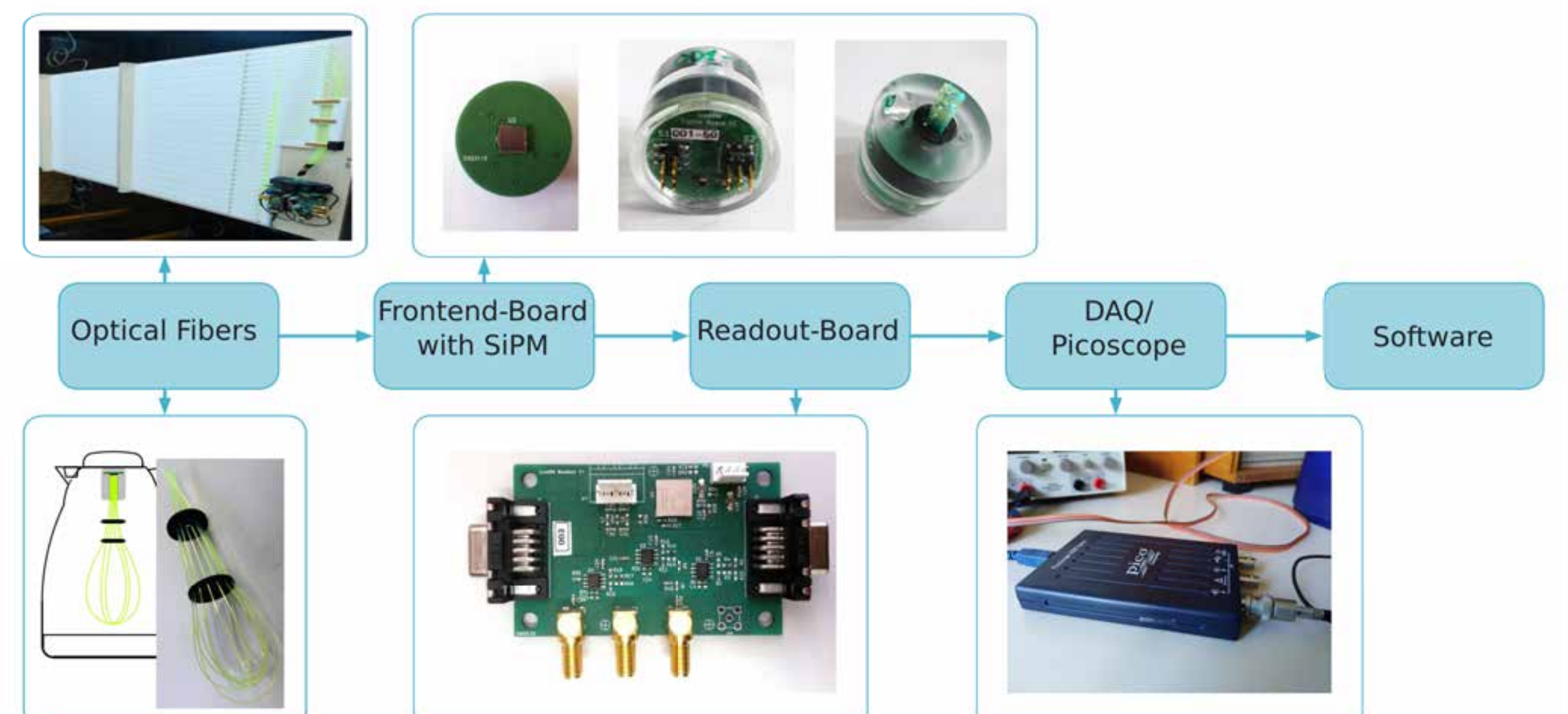


Variety of SiPMs

R&D in low light-level detection is still ongoing. [You can measure the properties of the newest devices.](#)

Outreach

Showcase experiments for students



Using the detector system from IceCube we build demo-experiments. [You can build your own hands-on experiment.](#)

If you are interested or have any questions, please contact us:

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