

KIT ASIC and Detector Lab

- **Initial Members:** Prof. Ivan Peric (Group Leader), Nicolas Striebig (Phd Student), Richard Leys (Researcher)
- **Research Interest:** Design of Large Area Pixel Sensors
- **Group Expertise:** Design of High Voltage CMOS Detectors and ASICs, versatile chip testing environment supported by the group (GECCO).
- **Active project examples:** Pixel sensor for Mu3E Experiment, pixel sensor for LHCb tracker upgrade, beam monitoring for Heavy Ion Therapy (HIT Center in Heidelberg), driver ASIC for Ultrasound Tomography.
- **Current Contributions:**
 - Ongoing Collaboration with Argonne and NASA: Astropix Low Power Sensor for Amego-X since 2020 (4th Sensor Iteration currently in production).
 - Astropix v4 specification and v2/v3 characterization results were used as basis for the ePIC Pb/SciFi+Pixels Hybrid Imaging Calorimeter proposal.



~2x2cm Astropix 3 Sensor placed on GECCO Carrier Board for Testing. Design by Nicolas Striebig @KIT, tests by Manoj Jadhav @Argonne and Amanda Steinhelb @NASA