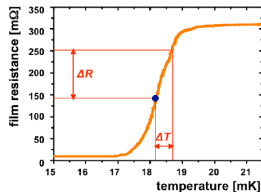
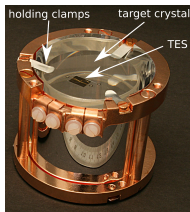
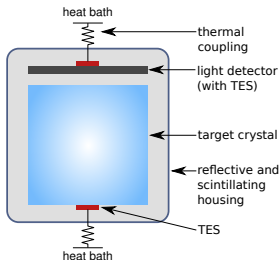


Phonon-Light Detectors for the CRESST Dark Matter search

Anja Tanzke on behalf of the CRESST collaboration

CRESST: Direct detection of Dark Matter in the form of WIMPs

- Scintillating **CaWO₄ crystals** as target material
→ energy depositions excite phonons → **Phonon detectors**
- Detection of scintillation light with separate **light detector**
→ allows particle discrimination
- Signals measured with transition edge sensors (TES)
consisting of a thin tungsten film



Phonon-Light Detectors for the CRESST Dark Matter search

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- Data of phonon detector of the the current data-taking phase
 - energy resolution: 0.090 keV at 2.6 keV
 - threshold: 0.60 keV
- New small phonon detectors will be optimized to enhance the sensitivity for low mass WIMPS
 - more sensitivity with a lower threshold of <0.1 keV

