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UNIVERSITÄT
TÜBINGEN

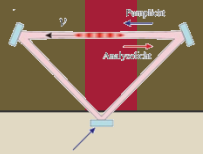
Physics at Tübingen

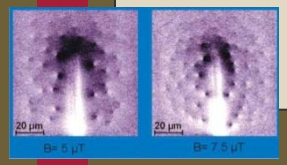
Astronomie and Astrophysics

Experimental Physics

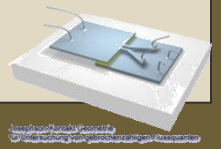
Applied Physics

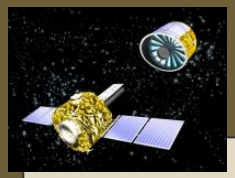
Theory

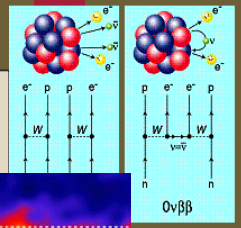




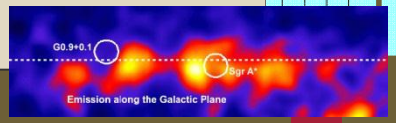
Collective Quantum Phenomena

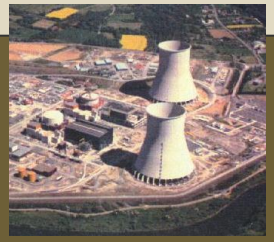




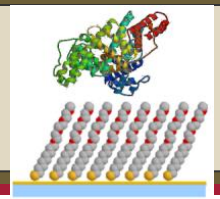


Astro and Particle Physics





BioNanoPhysics



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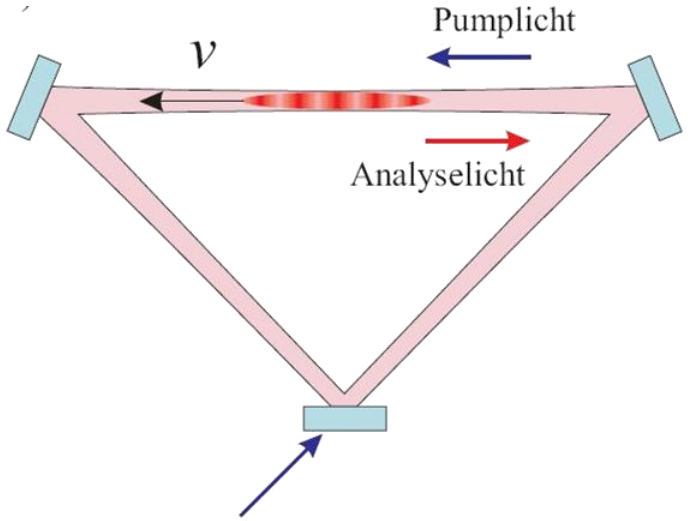
Center for Collective Quantum Phenomena

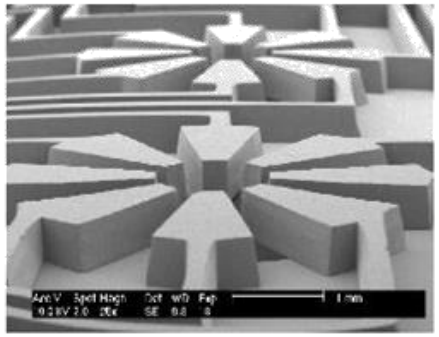
SuperConductivity
Cold Atom Physics
Nanotechnology

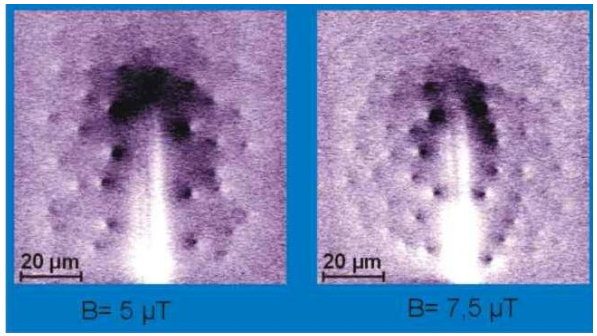
Qunatumtechnology and Applications

Experiment and Theory

- Quantumoptics / Nano-Atom-Optics
- SolidState Phyisics
- Nanostrcutures and Mesoscopic Structures







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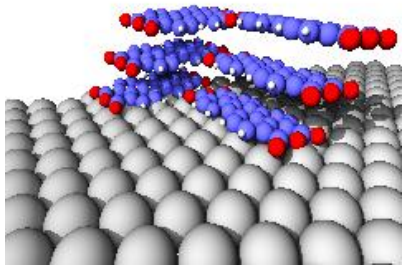
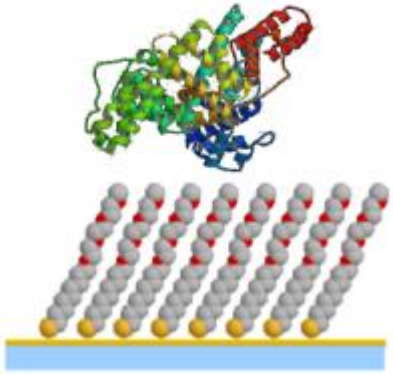
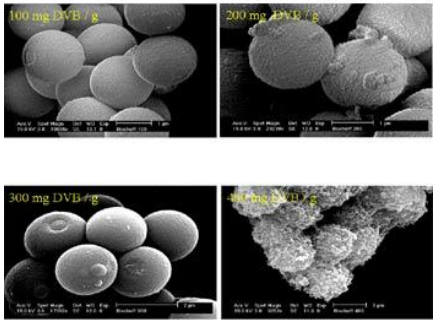
Center for BioNanoPhysics

Bio-Nano-Physics
Soft-Hard-Interfaces
Synchrotron-Radiation/ Neutron-Scattering

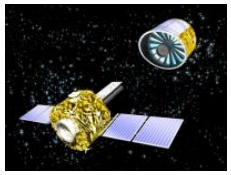
- Physics of molecular and biological Matter
  - organic semiconductors
  - Solid-liquid interfaces and Protein Adsorption







Kepler Center for Astro and Particle Physics

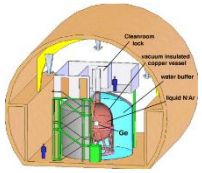


Observational Astronomy and Astrophysics
A.Santangelo, K.Werner

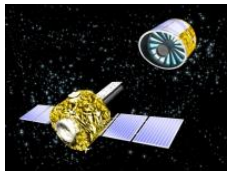
Theoretical Particle Physics
T.Gutsche, H.Reinhardt, W.Vogelsang

Theoretical Astrophysics
W.Kley, K.Kokkotas

Experimental Particle Physics
H.Clement, P.Grabmayr, J.Jochum, T. Lachenmaier, H.R.Schmidt

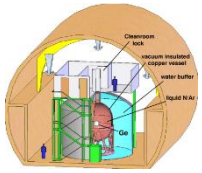


Kepler Center for Astro and Particle Physics



Science

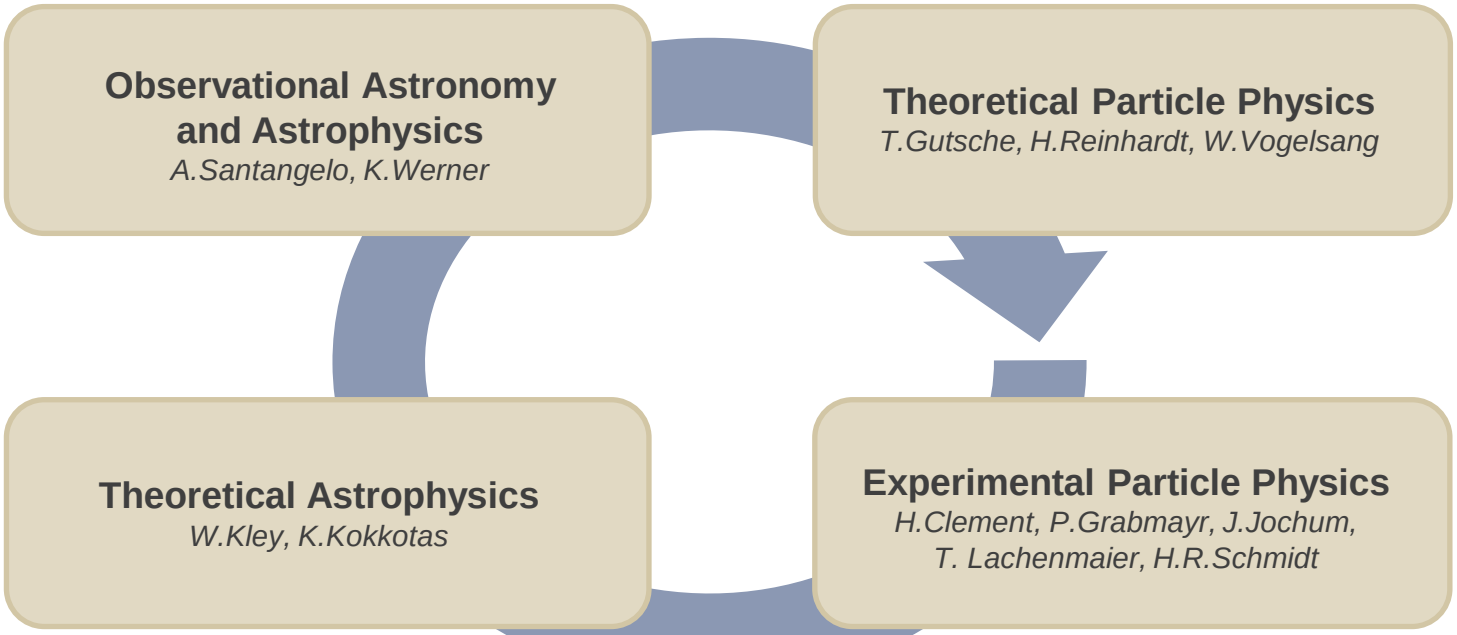
Matter in extreme conditions -Neutronstars-	Multimesseer Astrophysics	Particle Physics beyond the Standardmodel



Kepler Center for Astro and Particle Physics

X-Ray Astronomy, Study of Neutron Star Environment
Accretion Discs - *Satellites*

Collective Phenomena in Matter
at high Densities,
Neutron Stars,
QCD



Numerical Simulations of Accretion Discs,
Gravitational Waves, Neutron Star Mergers

Measurements of Matter at high Density
In heavy Ion Collissions – *GSI, CERN*

Matter in extreme conditions - Neutronstars

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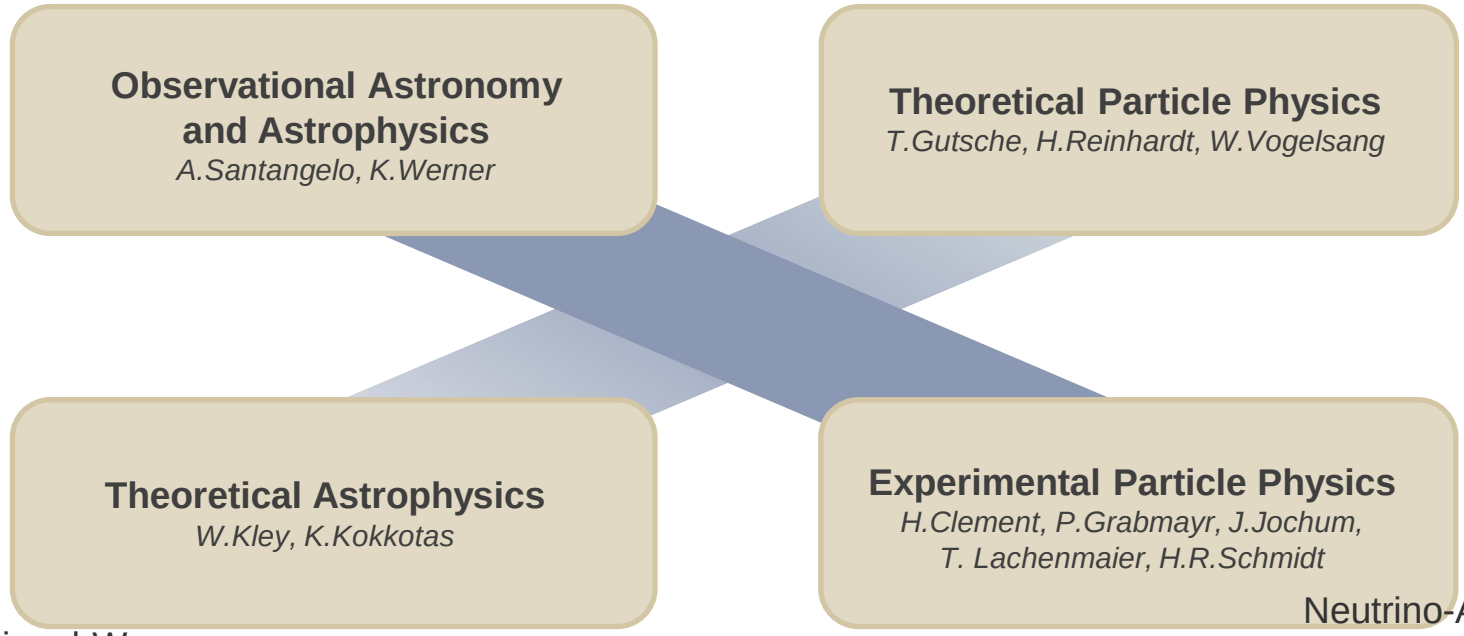
MATHEMATISCH-
NATURWISSENSCHAFTLICHE FAKULTÄT

Kepler Center for Astro and Particle Physics

Gamma-Astronomy,
Cosmic Rays,
Neutrino-Astronomy, Dark Matter

QCD
Theoretical Neutrinophysics



Dark Matter,
Neutrino-Astrophysics
Experimental Neutrino Physics

Gravitational Waves
General Relativity

**Multi-Messenger Astrophysics,
Particle Physics Beyond the Standard Model,
Dark Matter, Neutrino Physics**

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Kepler Center for Astro and Particle Physics

- Astrophysics -

X-Ray and Gamma Astronomy

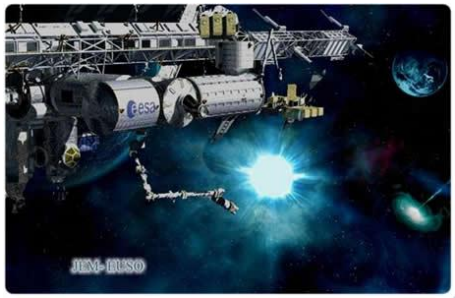
XMM Newton - Electronics

TeV Astronomy

HESS, CTA – Mirrors, Electronics

Ultar High Energy Astrophysics

JEM EUSO - , Electronics



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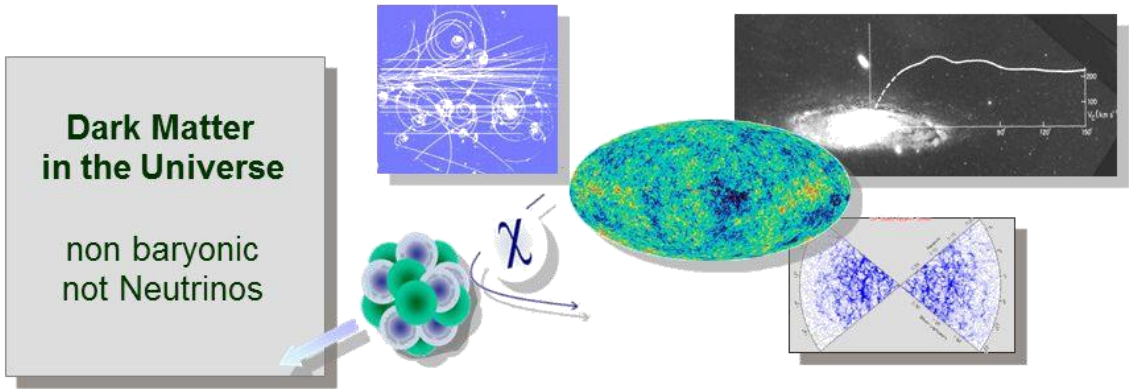
- Particle Physics -

Physics beyond the Standard Model



Dark Matter in the Universe

non baryonic
not Neutrinos

Neutrino Physics

Neutrino Mass

Neutrino Mixing

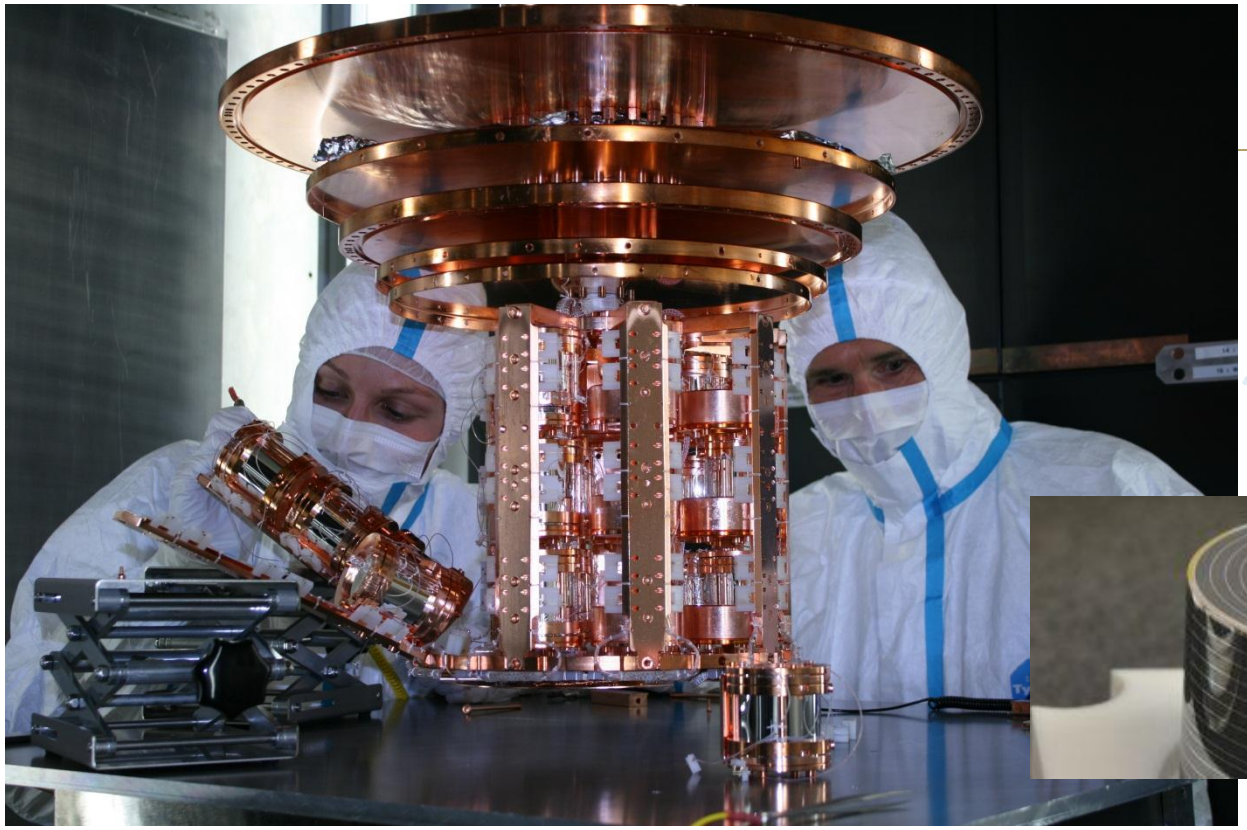
Matter Anti-Matter Imbalance

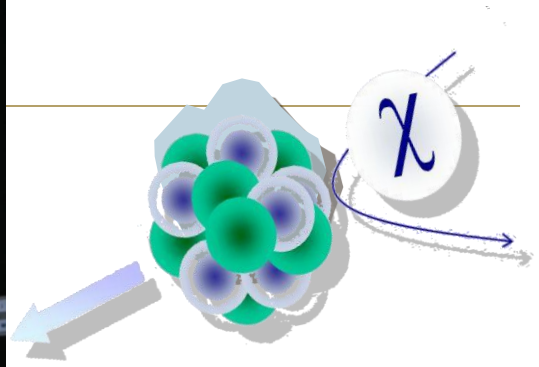
CP Violation

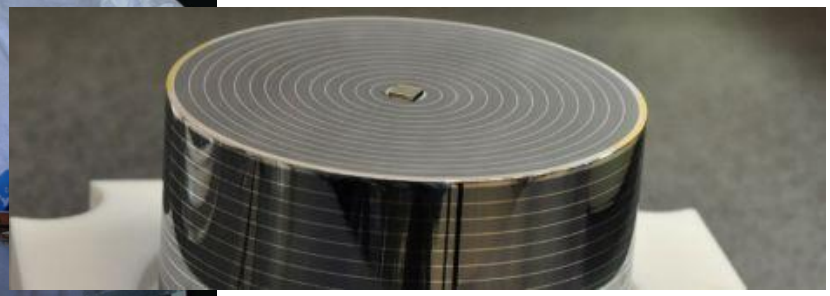
CRESST / EURECA
Direct Dark Matter Search

GERDA
Search for neutrinoless
Double Beta Decay

DoubleChooz
NeutrinoOscillations

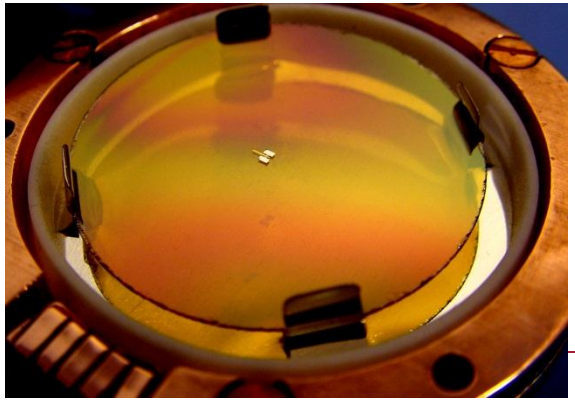






Edelweiss Ge FID Detector

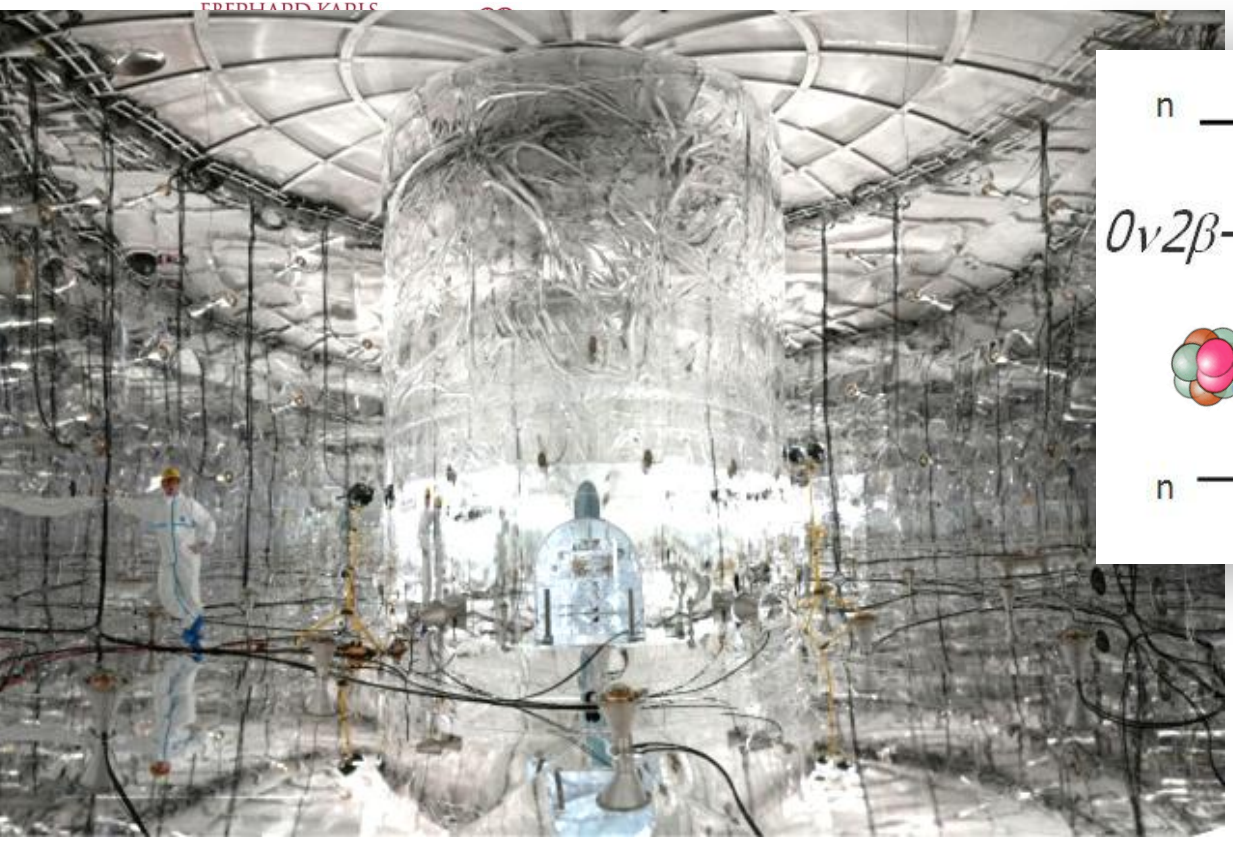
CRESST Cryostate and Detectors

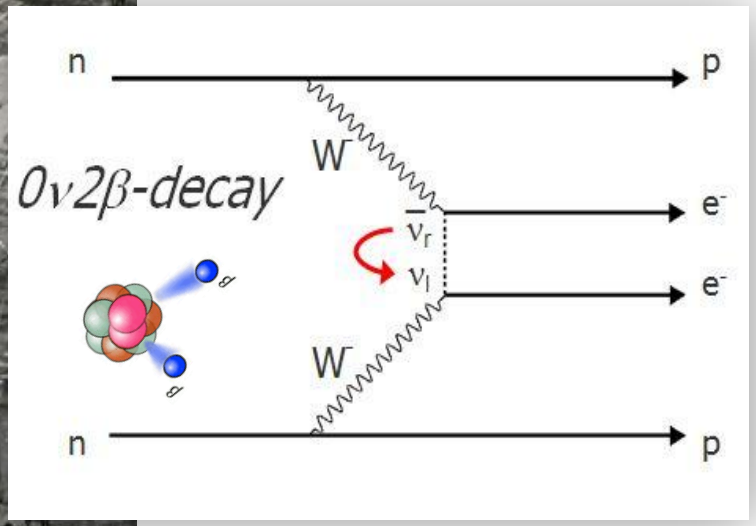


CRESST / EURECA

direct Dark Matter Search
– Particle Physics and Cosmology

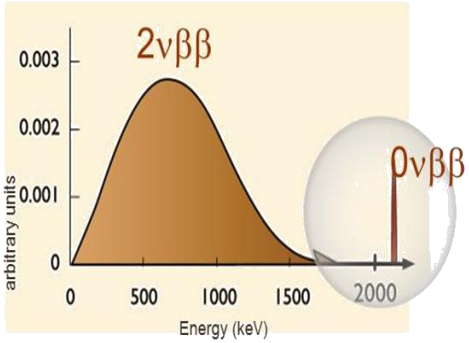
Superconducting Sensors
for Low Temperature Photon Detection





$\Rightarrow$ checks Majorana character

$\Rightarrow$ very sensitive to m_ν



GERDA- Neutrinoless Double Beta Decay

- Neutrino Properties

Water Cernekov Muon Veto
Enriched BeGe detectors

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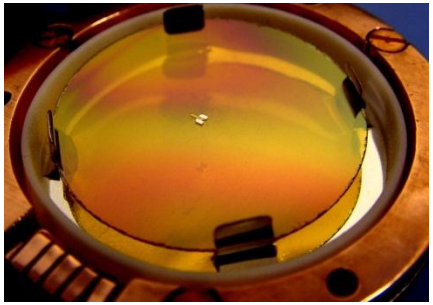
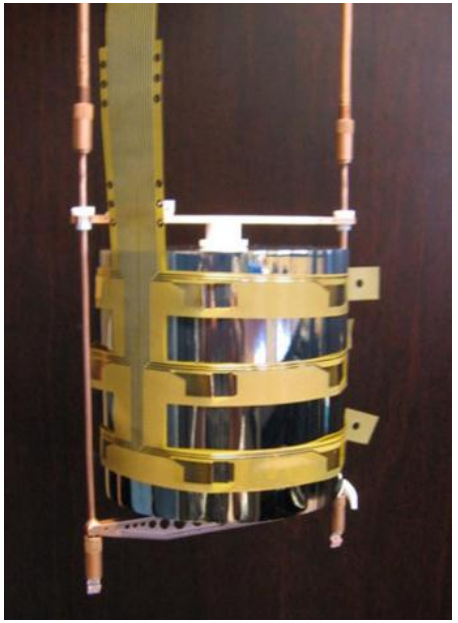
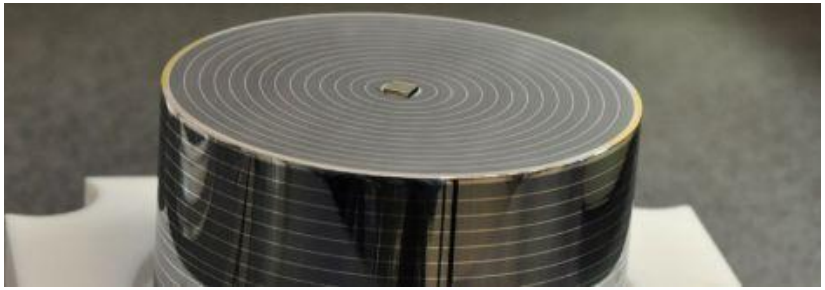


Detectors
and
Detector Development





Symposium of the Sino-German GDT Cooperation

chaired by Iris Abt (MPI for Physics), Peter Grabmayr (University of Tübingen)

from Monday, 8 April 2013 at **09:15** to Friday, 12 April 2013 at **23:30** (Europe/Berlin)
at **University of Tübingen**
Auf der Morgenstelle 14 72076 Tübingen