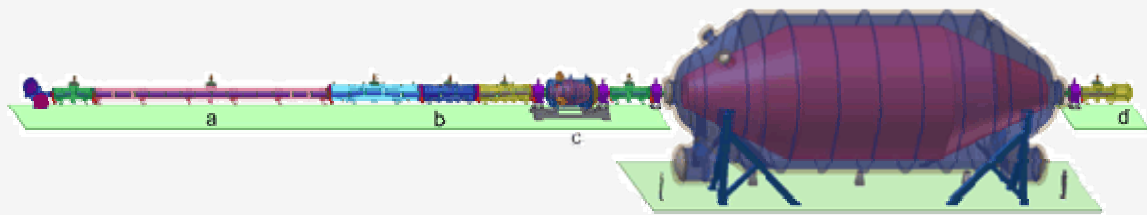


Forschungszentrum Karlsruhe is one of the biggest science and engineering research institutions in Europe and funded jointly by the Federal Republic of Germany and the State of Baden-Wuerttemberg. Its research and development program is embedded in the superordinate program structure of the Hermann von Helmholtz Association of National Research Centers and concentrates on the five research areas of Structure of Matter, Earth and Environment, Health, Energy, and Key Technologies.

The **Structure of Matter** research program comprises projects mainly in the fields of **Astroparticle Physics, Nuclear Astrophysics, Condensed Matter**, and utilization of **Synchrotron Radiation**. The Forschungszentrum Karlsruhe develops, builds, and runs several large instruments in these areas.

The KATRIN experiment is designed to measure the mass of the electron neutrino directly with a sensitivity of 0.2 eV. It is a next generation tritium beta-decay experiment scaling up the size and precision of previous experiments by an order of magnitude as well as the intensity of the tritium beta source.

## Karlsruhe Tritium Neutrino Experiment



**KATRIN from Tritium Source to Detector - please click on the image**

KATRIN is a joint effort of several European and U.S. institutions. The number of people involved in KATRIN is still growing. Currently there are about 100 scientists, engineers, technicians and students involved, including most of the groups that have worked on tritium beta-decay experiments in recent years. KATRIN is being built at Forschungszentrum Karlsruhe in Germany where much of the required technical infrastructure is already available, especially for the tritium source.