

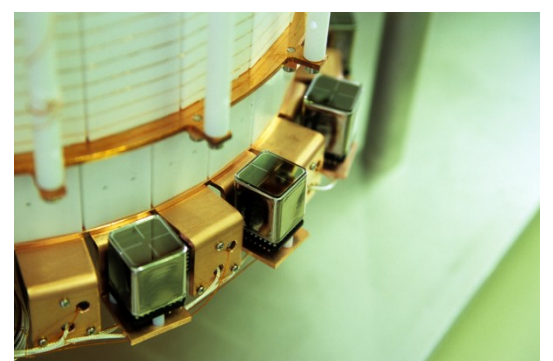
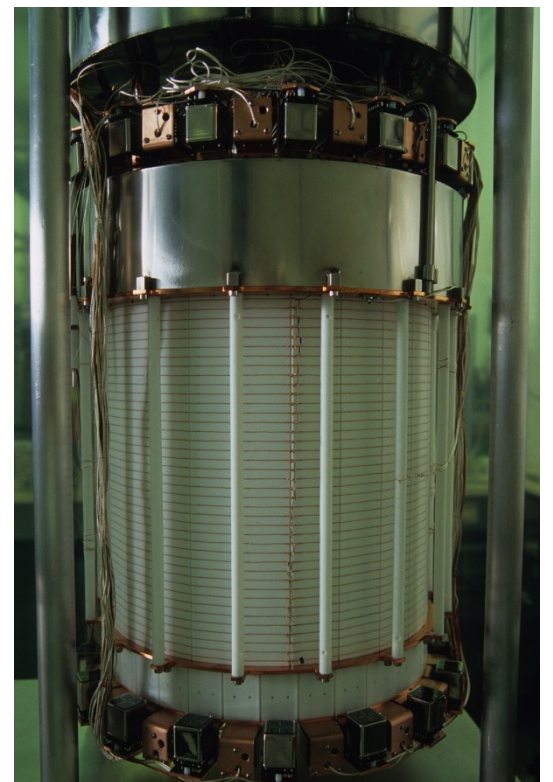
XENON100 – The new results.

Marc Schumann (University of Zurich)

Tuesday, 23 October 2012, 16:45 h
DESY Auditorium

There is plenty of indirect evidence that a large fraction of the energy content of the Universe is made from a yet unknown form of dark matter. The XENON 100 experiment, installed underground in the Laboratori Nazionali del Gran Sasso (LNGS, Italy), is searching for WIMP dark matter particles scattering off a large liquid xenon target. XENON100 features the lowest background of all running dark matter experiments and has recently published the results of 225 live days of data taking: No indication for a dark matter signal has been found, therefore leading to the strongest limits on WIMP-nucleon scattering cross sections to-date.

In this talk, I will introduce the experiment and focus on the recent results. Finally, the status of the successor experiment XENON1T, which aims at a sensitivity increase of 2 orders of magnitude, will be presented.



- **Coffee, tea and cookies will be served at 16:30h**
- **After the seminar there is a chance for private discussions with the speaker over wine and pretzels**