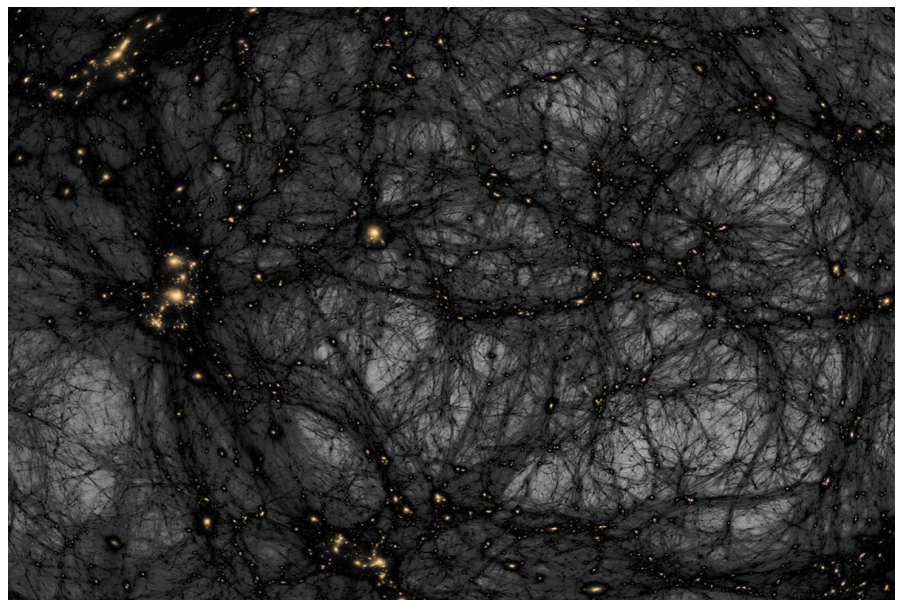




Dark Matter, the Next Phase.

Tuesday, 19 September 2017, 16:45 h
DESY Auditorium

Malcolm Fairbairn
(King's College London)



The search for Dark Matter is continuing with ever more sensitive detectors but still this elusive component of the matter in the Universe evades our detection. The two traditionally strongest candidates for dark matter are the WIMP (or thermal relic) and the axion, in this talk I will talk about the searches for both. As our underground dark matter detectors become larger we will soon start to detect neutrinos from the Sun and from Cosmic rays which seems to signal an end to this kind of search. I will explain how we might evade this background and also use it to search for new physics in the neutrino sector and in solar physics. I will then discuss axions, and how near future astronomical probes might limit the abundance of this particle in entirely new ways. Finally I will review some upcoming astrophysical observations which could help us understand more about this difficult-to-find energy density.

- **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**

