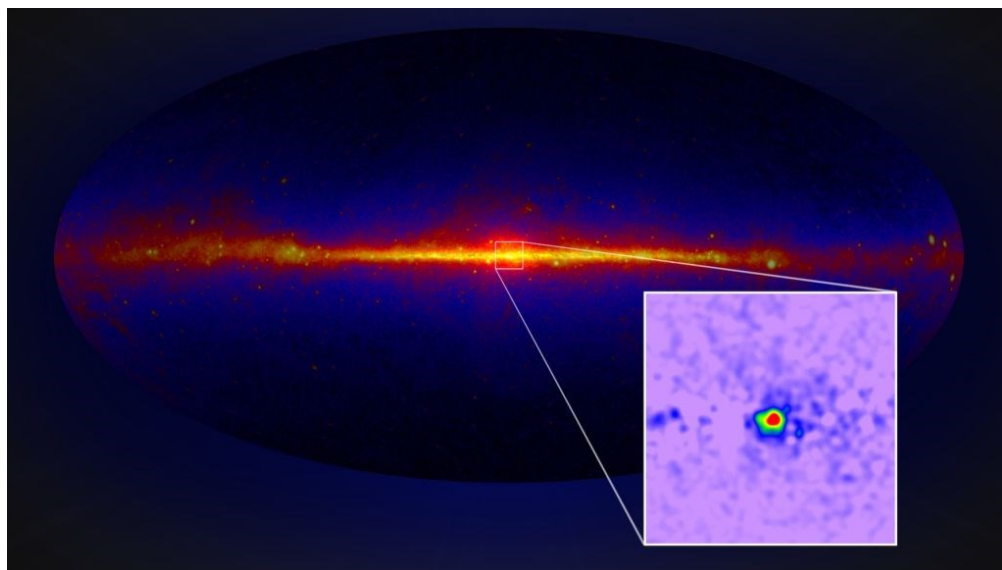


Gamma-ray searches for WIMP Dark Matter with the Fermi LAT: A Rhapsody in Blue.

Christoph Weniger (Amsterdam Univ.)

Tuesday, 07 July 2015, 16:45 h, DESY Auditorium



Despite the enormous success of astrophysical and cosmological research over the last decades, about 85% of the matter content in the Universe remains unknown. The currently leading hypothesis for this so-called dark matter are Weakly Interacting Massive Particles (WIMPs). Currently, indirect searches for self-annihilation products of these WIMPs in gamma rays are of particular interest, since high-precision data from the Fermi Large Area Telescope (LAT) allows for the first time the detailed study of a large number of promising targets, from the inner Galaxy to dwarf spheroidal galaxies and the extragalactic gamma-ray background. However, with the increasing sensitivity it becomes also more and more challenging to understand astrophysical foregrounds with the required accuracy. I will give here an overview over the history, status and possible fate of the most interesting signatures and dark matter signal candidates that were found in Fermi LAT data over the previous years.

- **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**

