PHYSIKALISCHES KOLLOQUIUM

Wintersemester 2022/23

Das Kolloquium findet (soweit nicht anders angegeben) **jeweils montags um 17:15 Uhr in Präsenz im Röntgen-Hörsaal des Physikalischen Instituts, Hubland Campus Süd, Universität Würzburg und online via Zoom statt.**

Link zum Zoom-Raum:
https://go.uniwue.de/physkolloqzoom

31.10.2022

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Reconstructing cosmology

Abstract

The standard model of cosmology assumes that the universe is isotropic & homogeneous when averaged on large scales. The dipole anisotropy of the CMB is attributed to our peculiar (non-Hubble) motion, due to local inhomogeneities, with relation to the cosmic rest frame in which the CMB looks isotropic. There should then be a corresponding dipole in the skymap of high redshift sources. Using catalogues of radio sources & quasars we find that the observed dipole does not match what is expected. This calls into question the standard assumption of the FLRW metric and the consequent inference that the universe is dominated by a Cosmological Constant or dark energy.

Für die Dozentinnen bzw. Dozenten der Fakultät

PD. Dr. Meyer, Prof. Dr. Assaad, Dr. Feichtner und Hr. Kögel