

PHYSIKALISCHES KOLLOQUIUM

AM 16. NOVEMBER 2020 UM 17 UHR C.T.

LIVESCHALTUNG VIA ZOOM

AKTUELLE INFORMATIONEN FINDEN SIE HIER: WWW.PHYSIK.UNI-FREIBURG.DE





DARK MATTER AXIONS: WHERE DO THEY COME FROM AND HOW TO DETECT THEM

BÉLA MAJOROVITS

MPI PHYSIK MÜNCHEN

Axions emerge as a solution of the so called strong CP problem, the unresolved question why no electric dipole moment of the neutron - associated to the predicted CP violation of Quantum Chromo Dynamics - can be observed. Strikingly, such axions can also solve the long standing dark matter problem. The motivation for introduction of the axion and axion like particles (ALPs) will be discussed. Constraints on the axion mass as dark matter will be given and the principles of axion and ALP detection will be explained. The status of experimental axion (and ALP) searches will be reviewed.