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**„Searches for electric dipole moments at PSI“**

The discovery of an electric dipole moment (EDM) of a fundamental particle would be a clear sign of violation of the combined symmetry of charge and parity conjugation (CPV). Although the known CP violation is nearly maximal in the weak sector of the SM, it is insufficient to explain the astrophysically observed matter-antimatter asymmetry. Furthermore, the CP-violating phase of the CKM matrix results in EDM being too tiny to be measured anytime soon, and hence any signal would indicate new physics.

I will present the latest search for the neutron EDM at the Paul Scherrer Institute (PSI), resulting in the most stringent upper limit of  $d_n < 1.8E-26$  ecm to date [Abel et al., PRL124(2020)081803], and report on the status of the new experiment currently being set up.

Further, I will present the worldwide first effort for a dedicated search for a muon EDM with a compact solenoid using the frozen spin method at PSI. These two searches, using the lightest unstable hadron and lepton, are complementary to each other. The neutron EDM by being sensitive to the CP-violating term of QCD, while the muon EDM nicely tests lepton universality using an antiparticle of the second generation.