

CP violation appeared in the superheavy molecules and experimental possibilities

Molecules containing radioactive heavy elements can be produced to serve as sensitive probes to study the origin of the fundamental symmetry violation. In this report, the experimental possibilities to search for the electron electric dipole moment (EDM) using the several candidate of the molecules with the heavy element will be discussed, and the EDM enhancement factor is evaluated using the relativistic coupled cluster model.

Primary author: SAKEMI, Yasuhiro (CNS)

Co-authors: NAGAHAMA, Hiroki (The University of Tokyo); NAKAMURA, Keisuke (CNS, The University of Tokyo)

Track Classification: Experimental Nuclear Physics: Low and Intermediate Energies