

# HYPER-RADIAL ASYMPTOTIC OF THE WAVE FUNCTION OF THREE PARTICLES WITH COULOMB INTERACTION IN THE CONTINUUM

*Thursday, 23 September 2021 18:35 (25 minutes)*

The asymptotic form of the wave function of a three-particle system interacting via Coulomb potentials in the continuum is described. The hyperradial asymptotic behavior of the wave function is found by study the weak asymptotic of the three-body wave function [1,2] and then applying to the asymptotic solutions of the Schroedinger equation in the hyper-spherical representation. The perspective of applications to the analysis of the few nucleon system is discussed.

1. S.L. Yakovlev, Theor. Math. Phys. 186 (1): 126 (2016)
2. S.L. Yakovlev, Theor. Math. Phys. 206 (1): 68-83 (2021)

**Primary author:** Prof. YAKOVLEV, Sergey (St Petersburg State University)

**Presenter:** Prof. YAKOVLEV, Sergey (St Petersburg State University)

**Session Classification:** Section 1. Experimental and theoretical studies of the properties of atomic nuclei

**Track Classification:** Section 1. Experimental and theoretical studies of the properties of atomic nuclei.