Contribution ID: 213 Type: not specified

## Klein-Gordon energy states of SCP under Plasma medium

Monday, 18 November 2024 12:00 (15 minutes)

This study investigates the influence of plasma screening on the relativistic behavior of a hydrogen-like atomic system through the application of a screened Coulomb potential. By accurately solving the Klein-Gordon equation in spherical coordinates, under the assumption that the scalar and vector potentials are equivalent, we get the self-energy spectrum of our system along with its corresponded wave functions.

**Primary authors:** KHALED, fatma zohra (Laboratory of Radiation Physics and their Interactions with Matter); Prof. MOUMNI, Mustapha (Department of Physics, University of Batna1, Algeria, Laboratory of Radiation Physics and their Interactions with Matter); Prof. FALEK, Mokhtar (LPPNNM, Department of Matter Sciences, University of Biskra, Algeria)

Presenter: KHALED, fatma zohra (Laboratory of Radiation Physics and their Interactions with Matter)

Session Classification: AfPS Contribution

Track Classification: AfPS