Contribution ID: 18

Type: not specified

Quantum model of spinning black holes. Quantum model of electron.

Monday 4 September 2023 12:50 (40 minutes)

We propose the quantum model of spinning black holes with the integrable ring singularities. For the modified Kerr-Newman quantum metric, the complete regularization occurs at fixation of the maximal (cut-off) energy of gravitons $k_{UV}^{reg} = \hbar c / R_S^{reg}$.

The domains of existence of one, two and several events horizons r_q are presented depending on parameters of the Kerr and Kerr-Newman modified metrics.

We also propose the quantum model of extended electron with zero self-energy on the basis of the regular quantum Kerr-Newman metric.

Primary author: NEZNAMOV, Vasiliy (Federal Nuclear Center-All-Russian Research Institute of Experimental Physics (FSUE "RFNC-VNIIEF"))

Co-authors: Mr SEDOV, Sergey (Federal Nuclear Center-All-Russian Research Institute of Experimental Physics (FSUE "RFNC-VNIIEF")); Mr SHEMARULIN, Valery (Federal Nuclear Center-All-Russian Research Institute of Experimental Physics (FSUE "RFNC-VNIIEF"))

Presenter: NEZNAMOV, Vasiliy (Federal Nuclear Center-All-Russian Research Institute of Experimental Physics (FSUE "RFNC-VNIIEF"))

Session Classification: Plenary