

## The bare and gravitationally dressed electron based on the Kerr-Newman black hole solution

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The initiated by Carter (1969) electron model, based on the Kerr-Newman (KN) black hole solution, was recently modified to form a heavy electron model dressed by gravity. Similar to QED, gravitating electron can be considered as a bare or dressed model, where the bare electron represents a massless relativistic ring string creating wave function of quantum theory, while the dressed electron forms a heavy electron- positron vacuum core, dressed by two Wilson loops subjected to gravitational frame-dragging. We show that this modified gravitating electron model is not full indeed, since the exact KN solution is radiation free and excitations of the white (electron) sheet do not correlate with excitations of the black (positron) sheet. Based on our previous works (2002-2004), we obtain the corresponding radiative KN solutions, including the both chiral and anti-chiral excitations and find that these solutions acquires an additional axial stringy system containing both incoming and outgoing electromagnetic radiation. Surprisingly, the external manifestations of the radiative KN solution are similar to behavior of astrophysical systems known as Blasers.

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