

Structure of the quark–gluon vertex in a rotating medium at finite temperature

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Several studies in heavy-ion collisions suggest that vorticity plays a relevant role in the final observables. In this ongoing work, we address the one-loop radiative correction to the quark–gluon vertex in a rotating medium at finite temperature. The calculation is based on the quark propagator in the presence of vorticity, incorporating thermal effects through the Matsubara formalism. Preliminary results show modifications in the vertex associated with thermal vorticity, providing tools to better understand scenarios such as relativistic heavy-ion collisions or the early universe, where these properties naturally emerge.

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