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Radiation from accelerated charges at strong coupling

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We present our latest results concerning the radiation spectrum emitted by a relativistic charged particle at strong coupling, employing the theoretical techniques provided by the AdS/CFT correspondence. We compare with other recent analyses of this problem with heavy quarks [1,2], and in our case we do find deviations from the (classical) Lienard formula once we take into account all the relevant quantum effects.

References:
[1] C.Athanasiou, P.M.Chesler, H.Liu, D.Nickel and K.Rajagopal, Synchrotron radiation in strongly coupled conformal field theories," Phys. Rev. D81, 126001 (2010).
[2] Y.Hatta, E.Iancu, A.H.Mueller and D.N.Triantafyllopoulos,Aspects of the UV/IR correspondence: energy broadening and string fluctuations," JHEP 1102, 065 (2011).

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