Composition of the Quark-Gluon plasma

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Abstract

We present in this paper a systematic study of the Quark-Gluon plasma (QGP) composition and its relation to the structure of QCD and the blue-shooter theory of the Faraday field. We find that the QGP is composed of two distinct parts: a component with the classical quarkgluon plasma and a component containing the intermediate quark-gluon plasma. In the second part of the composition of the QGP we find that the quark-gluon plasma is a quarkgluon plasma and the intermediate quark-gluon plasma is a gluon plasma. These results automatically imply that the QCD is not dual to the gluon plasma and the blue-shooter theory of the Faraday field. We also find that both the quarks and gluons are dual to the gluons in the second part of the composition.