

Multifractal dimension of a QCD superinclusive observable

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This research discusses topics in the field of Quantum ChromoDynamics and high energy physics. We consider an electron-positron scattering process and introduce a so-called superinclusive observable, suggested to us by Giorgio Parisi. This observable allows one to study the energy flow of an event due to QCD final-state radiation. The aim of the research is to give a theoretical prediction of its behaviour in the collinear limit, showing its connection with the multifractal laws of statistical physics.

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