

Initiation to birdtracks in QCD

These lectures are a basic introduction to the technique of « birdtracks » , which aims to address the color structure of QCD in a pictorial way. In four lessons we will learn the basic rules, discuss color conservation and infinitesimal color rotations, learn how to project on partonic color states, derive their Casimir charges... and simultaneously learn some representation theory. Participation in these courses does not require any prior knowledge (not even in QCD), except perhaps some notions of linear algebra (which will be recalled anyway). The lessons will include a list of very simple exercises to keep the focus.

Summary

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Session Classification: QCD