Where are the quarks inside the nucleon?

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In this presentation I am going to talk about structure of hadrons in terms of fundamental constituents - quarks and gluons. Starting with a dicussion of deep inelastic lepton scattering, deeply virtual Compton scattering and review of modern experimental efforts we go to their description in operator product expansion (OPE) formalism and indicate how OPE is related to the parton model. Then we proceed to nonperturbative analytic framework for QCD calculations - lattice gauge theory. We concentrate on extraction of parton distributions from lattice simulation results. Review of computational techniques and challenges will be provided.