International Workshop "Infinite and Finite Nuclear Matter" (INFINUM-2025)



Contribution ID: 3

Type: not specified

Active role of gluons in multiparticle production.

Long-term studies of multiparticle processes indicate an ever-increasing role of the gluon component of hadrons and its active participation in the formation of secondary hadrons. The gluon dominance model, taking into account the stage of the quark-gluon cascade, based on PT QCD and hadronization, described by a phenomenological scheme is consistent with experimental data well.

The development of this model occurred with the appearance of data on multiplicity at different accelerators. According to this model, the creation of secondary particles is carried out by active gluons, while valence quarks remain in the leading particles. It is confirmed the fragmentation mechanism of hadronization in e^+e^- annihilation and recombination in hadron collisions, and also many other phenomena.

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