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## Hadronic effects within dispersive approach to QCD: tau lepton decay and vacuum polarization function

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The dispersive approach to QCD, which extends the applicability range of perturbation theory towards the infrared domain, is developed. This approach properly accounts for the intrinsically nonperturbative constraints, which originate in the low-energy kinematic restrictions on pertinent strong interaction processes. The dispersive approach proves to be capable of describing recently updated ALEPH and OPAL experimental data on inclusive tau lepton hadronic decay in vector and axial-vector channels in a self-consistent way. The vacuum polarization function obtained within developed approach appears to be in a good agreement with relevant low-energy lattice simulation data.

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