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## Spin alignment of vector mesons in holographic model

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The global spin alignment for the  $\phi$  meson has been recently observed by the STAR collaboration at RHIC, implying that the spin of its constituent quark has a significant correlation with the spin of the constituent antiquark, which may arise from their strong interaction with the quark-gluon plasma. We develop a general framework for studying the spin alignment  $\rho_{00}$  for flavorless vector mesons by using the gauge/gravity duality. Focusing on the dilepton production through vector meson decay, we derive the relation between production rates at each spin channel and meson's spectral function, which can be evaluated by holographic models for a strongly coupled system. As examples, we study  $\rho_{00}$  for  $J/\psi$  and  $\phi$  mesons, induced by the relative motion to a thermal background, within the soft-wall model. We show that  $\rho_{00}$  in the helicity frame for  $J/\psi$  and  $\phi$  mesons have positive and negative deviations from  $1/3$  at  $T = 150$  MeV, respectively, which consequently leads to different properties for their global spin alignments.

**Auteurs principaux:** SHENG, Xin-Li (INFN Firenze); BECATTINI, Francesco (Università di Firenze); Dr ZHAO, Yan-Qing (Central China Normal University); Prof. LI, Si-Wen (Dalian Maritime university); Prof. HOU, Defu (Central China Normal University)

**Orateur:** SHENG, Xin-Li (INFN Firenze)

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