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Lattice calculation of Ds* radiative decay width

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We perform a lattice calculation on the radiative decay of D_s^* using the (2+1) Wilson-Clover gauge ensembles generated by CLQCD collaboration. The radiative transition $D_s^* \to D_s \gamma$ and Dalitz decay $D_s^* \to D_s e^+ e^-$ are studied respectively. After a continuous extrapolation under three lattice spacings, we finally obtain these decay widths with much reduced errors compared to previous study. A poorly-known decay width of D_s^* is also determined precisely taking into account the the experimental branching fraction.

Primary author(s): MENG, Yu (Zhengzhou University)

Presenter(s): MENG, Yu (Zhengzhou University)