

## Charmonia Decays on the Lattice

*Tuesday, 2 November 2021 10:30 (30 minutes)*

The charmonia decays present an ideal laboratory for testing the interplay between perturbative and nonperturbative QCD. In this talk, I focus on the all-photon decay and radiative decay of charmonia. Adopting a new method proposed recently, we perform the systematic lattice calculations on  $\eta_c/\chi_{c0} \rightarrow 2\gamma$  and  $J/\psi \rightarrow \gamma\eta_c$ . By using three  $N_f=2$  twisted mass gauge ensembles with different lattice spacings, we obtain the final decay width for these processes. In the end, more interesting charmonia decays are looked forward.

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