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Radiative Transitions in Charmonium from Lattice QCD

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We present calculations of form factors and radiative transitions in the low-lying charmonium sector using Lattice QCD. Results for $J/\psi \rightarrow \eta_c \gamma$, $\chi_{c0} \rightarrow J/\psi \gamma$ partial widths are presented alongside other experimentally unobservable form factors. Comparisons are given to previous results in both lattice and experimental studies. Studying radiative transitions provides insights into the structure of charmonia and this study serves as a demonstration of techniques applicable to other more interesting transitions, such as those involving excited and exotic states.

Based on work in preparation by

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