

# The $s \rightarrow d$ gamma decay in and beyond the Standard Model

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FCNC are suppressed in the Standard Model, and thus constitute our best tools to search for New Physics in low-energy flavor experiment. In this talk, the phenomenology of the  $s \rightarrow d$  gamma transition is analyzed. In a first part, the anatomy of the Standard Model contributions is reviewed, emphasizing the similarities and differences with that of  $b \rightarrow s$  gamma. Besides, it is shown that the radiative transitions could hold the key to the theoretical control of  $\epsilon'/\epsilon$ . Then, a systematic study of the possible New Physics impacts is performed by combining all the FCNC transitions in the  $s \rightarrow d$  sector, i.e.  $\epsilon'$ , rare K decays, and radiative decays, first in a model-independent setting and then in the MSSM.

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