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## $B \rightarrow K^*$ decays in a finite volume

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We propose a framework for the extraction of the  $B \rightarrow K^*$  decay form factors from lattice data, based on the non-relativistic effective field theory in a finite volume. A possible admixture of the  $\eta K$  channel is studied, and the multi-channel Lellouch-Luescher formula is reproduced. Further, a procedure is formulated for the extraction of the form-factors at the resonance pole. The definition of the photon virtuality at the resonance pole is discussed. The limit of an infinitely narrow resonance is investigated in detail in the multi-channel case.

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