Title:	Sensitivity Study and Improving Background Reduction of Rare Decays in Belle II
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Abstract:	In the Belle II experiment, the decays of interest and full event topology are re- constructed from their final state particles detected by various sub-detectors. In the process of reconstructing these decays, random combinations or similar topology lead to some events behaving similar to the signal. These events are known as background and provide challenges especially for rare decay studies. There has been no study of reconstructing all the possible decay modes in the background and to study their behaviour in different processes. We try to do this and use known kinematic infor- mation of these background decays. The main aim was to use this information with the event topology and identify the type of event that is reconstructed. This will also further help in reconstruction of full event topology for rare decays.
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