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Measurement of the Xi_c+ Lifetime with Belle II Simulations PAUL GEBELINE, JAKE BENNETT, University of Mississippi, BELLE II COLLABORATION¹ — We present a measurement of the lifetime of the Xi_c baryon using simulated data from the Belle II experiment, based at the SuperKEKB electron-positron collider in Tsukuba, Japan. Multiple Xi_c decay modes are investigated to explore the feasibility of lifetime measurements of this type at Belle II. After verifying the results on simulation, this study will be applied to Belle II data.

 $^1\mathrm{Belle}\,\mathrm{II}$ experiment, superKEKB electron-positron collider based in Tsukuba, Japan

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