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Three-baryon forces probed by deuteron-Xi femtoscopy

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The correlation function between deuteron and Xi particles produced in high-energy nuclear collisions has attracted attention as a quantity that provides information on the spatial distribution of these particles and the interaction between them. The two-baryon and three-baryon forces acting on subsystems of the three-baryon system are considered as possible interactions, but the role of the three-baryon force on the correlation function has not yet been elucidated. In this talk, I will employ the baryon three-body force based on the SU(3) chiral effective field theory and explain how it affects the correlation function.

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