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Addressing the pΩ femtoscopy correlation function using baryon-baryon effective potentials

Monday 26 January 2026 15:55 (15 minutes)

Following up on the topic presented by Dr. Juan Torres-Rincon, we will discuss the pΩ femtoscopy correlation functions, obtained through an updated version of the pΩ potential for low-energy interactions based on an effective field theory approach. This potential has been used to solve the Schrödinger equation and obtain the scattering wave functions. With these, we have computed the pΩ femtoscopic correlation functions and compared the results with those published by the ALICE collaboration of the LHC. We will also introduce the inverse problem of computing the parameters of the potential from the measured correlation function using neural networks, in which we are currently working on.

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