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The femtoscopic technique—an invaluable tool in studies of exotic hadrons

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The femtoscopic technique has emerged as a power tool to extract the strong interactions between pairs of unstable hadrons. In this talk, we show how one can apply such a technique to decipher the nature of recently discovered exotic hadrons. We show how the correlation functions are inherently connected with the underlying strong interactions in the presence of a virtual, bound, or resonant state. As examples, we show how it can determine the spins of the pentaquark states Pc(4440) and Pc(4457) and whether Zc(3900)/Zcs(3985) is a resonance or virtual state.

session

B. Hadron Spectroscopy

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