

# Baryon-baryon femtoscopy in pp and p-A collisions (ALICE collaboration)

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## Collaboration

ALICE

## Abstract content

Femtoscopy is a method relating particle correlations to their emission source and interaction potential. Applying this technique to a small collision system, such as pp, has the advantage of probing the inner part of the interaction potential. In order to allow for an accurate determination of the correlation function for small sources, we have developed a new C++ analysis tool called “Correlation Analysis Tool using the Schrödinger equation” (CATS), which will be presented in this talk.

We present ALICE results on baryon-baryon correlations obtained from the RUN 2 operation of the LHC in pp collisions at 13 TeV and p-Pb collisions at 5.02 TeV. The statistics of RUN 2 data provide a higher precision in the analysis of the p-p, p- $\Lambda$  and  $\Lambda$ - $\Lambda$  correlations, and additionally make it possible to probe the interaction of more exotic pairs like p- $\Xi$ . Thanks to ongoing collaborations with theory groups working on chiral and lattice calculations we are in the position to compare the predicted correlation functions with the experimental data.

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