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【338】Towards a measurement of the charm mixing parameter y_{CP} in $D^0 \to h^+h^-$ decays

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CP Violation (CPV) in the two-body decays of charm mesons was recently observed by the LHCb collaboration through the ΔA_{CP} parameter. Current theoretical uncertainties cannot establish if this effect is due to physics beyond the Standard Model or not. Tests of CPV in the mixing or in the interference between mixing and decay might help clarify the picture. One way to probe these effects is to measure $y_{\mathrm{CP}} \equiv \hat{\Gamma}(D^0 \to h^+h^-)/\hat{\Gamma}(D^0 \to K^-\pi^+)$ where h is a pion or a kaon. The main challenge is the determination of the detection efficiencies of the daughter particles to correct the reconstructed decay times of the D^0 mesons. This presentation will focus on an innovative data-driven approach to tackle this issue.

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