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Calculation of the decay width of decuplet baryons

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We present an update of our investigation of hadronic decays of decuplet baryons using the transfer matrix method.

In addition to the benchmark decay $\Delta \rightarrow \pi N$ we look at other channels, like $\Sigma^{\{ \} \rightarrow \pi \Sigma$ and $\Sigma^{\{ \} \rightarrow \pi \Lambda$

to further test the reach of the method. Lattice calculations are done using a hybrid setup with domain wall fermions on a

staggered sea at pion mass 350 MeV and using a unitary setup with domain wall fermions at pion mass 180 MeV.

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