

Charm baryons in lattice QCD at finite temperature

Friday, 21 April 2023 10:00 (30 minutes)

Singly and doubly spin $1/2$ charmed baryons are investigated at multiple temperatures using the anisotropic FASTSUM 'Generation 2L' lattice QCD ensembles. We discuss the temperature dependence of these baryons' spectrum in both parity channel with a focus on the confining phase. We use fit independent methods to determine when a traditional fitting procedure and mass determination is appropriate. To further qualify the behaviour of these states around the pseudocritical temperature, the parity doubling due to the restoration of chiral symmetry is examined.

Primary author: BIGNELL, Ryan (Swansea University)

Presenter: BIGNELL, Ryan (Swansea University)

Session Classification: Talks