

Thermal lattice QCD results from the FASTSUM collaboration

Friday, 19 July 2024 11:19 (17 minutes)

The FASTSUM Collaboration has developed a comprehensive research programme in thermal lattice QCD using 2+1 flavour ensembles. We will review our recent hadron spectrum results including analyses of open charm mesons and charm baryons at non-zero temperature. We also detail our determination of the interquark potential in the bottomonium system using NRQCD quarks. Finally, we summarise our work comparing various spectral reconstruction methods in this system. All of our work uses anisotropic lattices where the temporal lattice spacing is considerably finer than the spatial one allowing better resolution of temporal correlation functions.

Alternate track

1. Strong Interactions and Hadron Physics

I read the instructions above

Yes

Primary authors: Dr SMECCA, Antonio (Swansea University); JÄGER, Benjamin; Dr PAGE, Benjamin (Swansea University); ALLTON, Christopher Roland (Swansea University); AARTS, Gert; SKULLERUD, Jon-Ivar; LOMBARDO, Maria Paola; Dr ANWAR, Muhammad Naeem (Department of Physics, Swansea University); BIGNELL, Ryan (Swansea University); KIM, Seyong (Unknown); HANDS, Simon; Prof. RYAN, Sinead (Trinity College Dublin); BURNS, Timothy; SPRIGGS, thomas (Swansea University)

Presenter: ALLTON, Christopher Roland (Swansea University)

Session Classification: Heavy Ions

Track Classification: 07. Heavy Ions