Contribution ID: 95 Type: Oral

## **Nucleon gluon PDF from lattice QCD**

The unpolarized and polarized gluon parton distribution functions are calculated in lattice QCD using the Large-Momentum Effective Theory(LaMET) method. The calculations are carried out at three different lattice spacings and pion mass around 300MeV. The results are extrapolated to the continuum and infinite momentum limits. The unpolarized gluon PDF is consistent with the global fit of CT18NNLO.

**Primary authors:** Ms CHEN, Chen (Institute of Modern Physics, CAS); Mr DONG, Hongxin; LIU, Liuming (Institute of Modern Physics, CAS); Prof. SUN, Peng (Institute of Modern Physics, CAS); YANG, Yi-Bo (ITP/CAS); Dr YAO, Fei; ZHANG, Jianhui (The Chinese University of Hong Kong, Shenzhen); Ms ZHONG, Shiyi

**Presenter:** LIU, Liuming (Institute of Modern Physics, CAS)

Session Classification: Parallel

Track Classification: Nucleon helicity structure