

# Taylor expansion and the Cauchy Residue Theorem for finite-density QCD

*Friday, July 27, 2018 2:40 PM (20 minutes)*

The QCD pressure at non-zero chemical potential  $\mu$  is typically obtained via a Taylor expansion in  $\mu$ . The Taylor coefficients are traces of powers of the inverse Dirac matrices, which are computed using many noisy estimators. Here, we present an alternative based on the Cauchy Residue Theorem and discuss its merits for the Taylor coefficients.

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**Session Classification:** Nonzero Temperature and Density

**Track Classification:** Nonzero Temperature and Density