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## How the Quark Number fluctuates in QCD at small chemical potential

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We discuss the distribution of the quark number over the gauge fields for QCD at nonzero quark chemical potential. As the quark number operator is non-hermitian, the distribution is over the complex plane. Moreover, because of the fermion determinant, the distribution is not real and positive. The computation is carried out within leading order chiral perturbation theory and gives direct insight into the delicate cancellations that take place in contributions to the total baryon number.

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talk

**Primary authors:** Prof. VERBAARSCHOT, J.J.M. (Stony Brook, SUNY); SPLITTORFF, Kim (The Niels Bohr Institute); Prof. LOMBARDO, M.P. (LNF, Italy)

**Presenter:** SPLITTORFF, Kim (The Niels Bohr Institute)

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