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## Fluctuations of the electric charge in theory and experiment

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We present the continuum extrapolated kurtosis, skewness and variance of the electric charge in a grand canonical ensemble with zero or small chemical potential. This observable has a particular relevance in Heavy Ion Physics since ratios of such fluctuations have been measured in experiment at the chemical freeze-out. We discuss how lattice results describe the STAR fluctuation data at RHIC and show a thermometer candidate for the LHC.

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