## Quenched topological susceptibility with Metropolis algorithm.

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We show results of  $\chi_T^{\text{que}}\beta$  obtained by using the Metropolis algorithm for pure gauge theory. We compare the results with the outcome of the HMC algorithm. In fig. 2 we show the autocorrelation time of the topological charge.

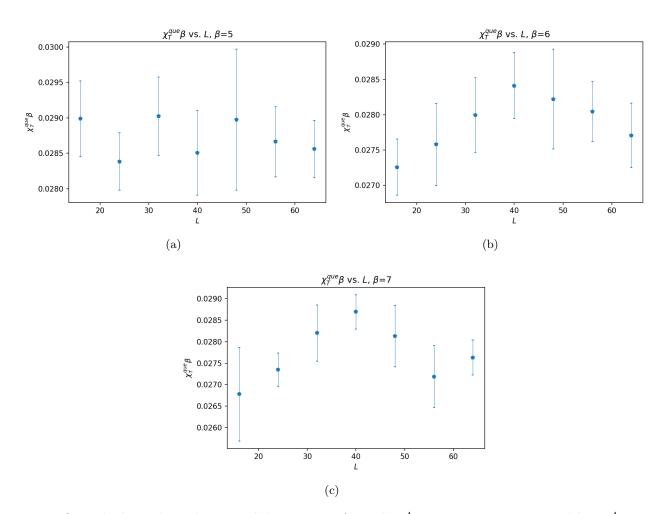


Figure 1: Quenched topological susceptibility. We performed  $10^4$  measurements separated by  $10^4$  sweeps.

β	Metropolis	$_{ m HMC}$
5	0.02873(7)	0.0286(2)
6	0.02789(4)	0.0279(1)
7	0.02771(9)	0.02789(1)

Table 1: Results of  $\chi_T^{\text{que}}\beta$  for different  $\beta$  values obtained with pure gauge theory simulations. The values of  $\chi_T^{\text{que}}\beta$  are an average of the results shown in fig. 1.

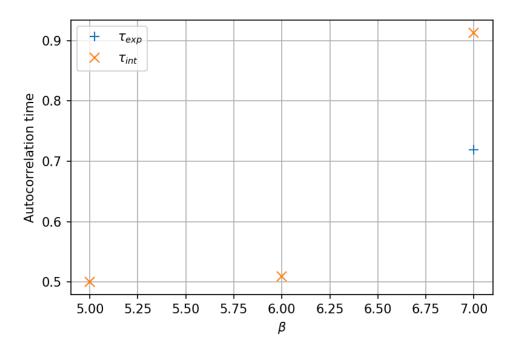


Figure 2: Exponential and integrated autocorrelation times of the topological charge for different  $\beta$  values and L=64.