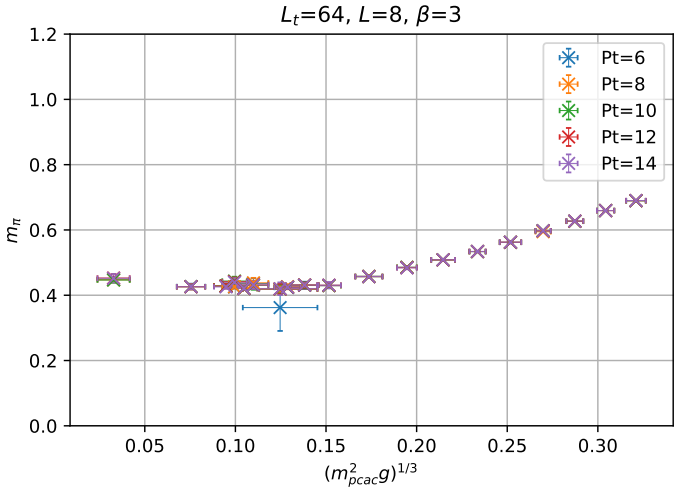
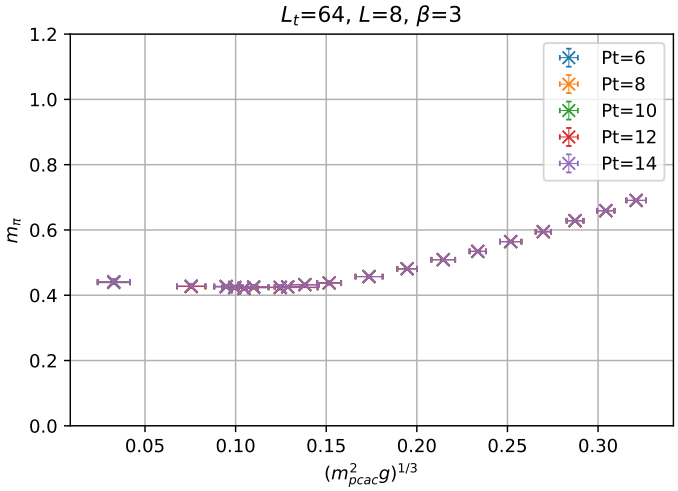
Pion mass with σ_3

March 17, 2022

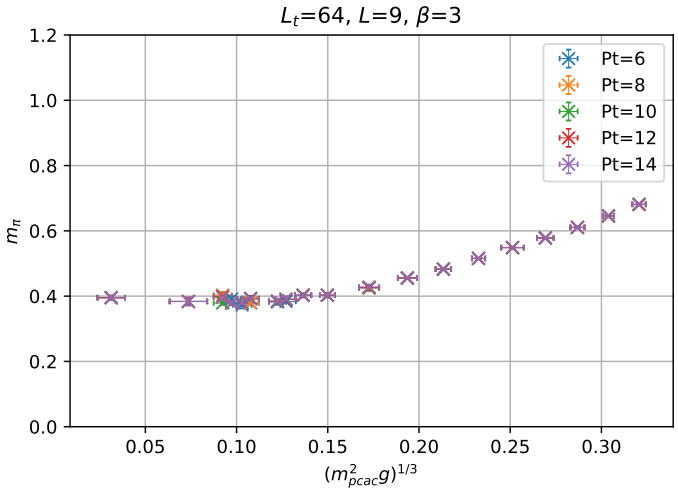
1 $\beta = 3$



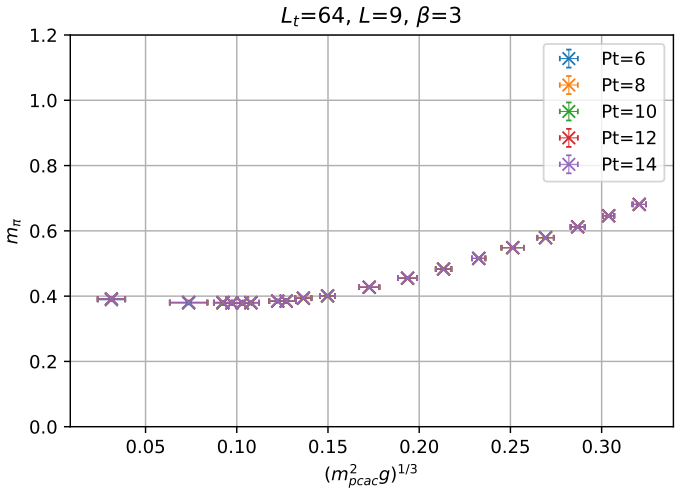
(a) Chi square analysis



(b) Variance analysis

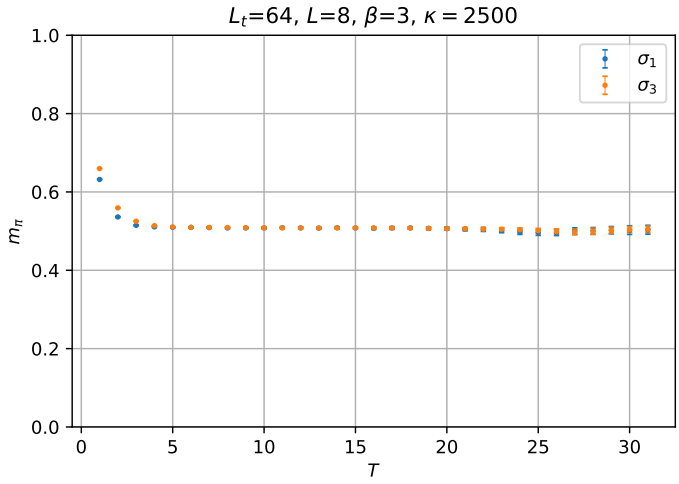


(c) Chi square analysis

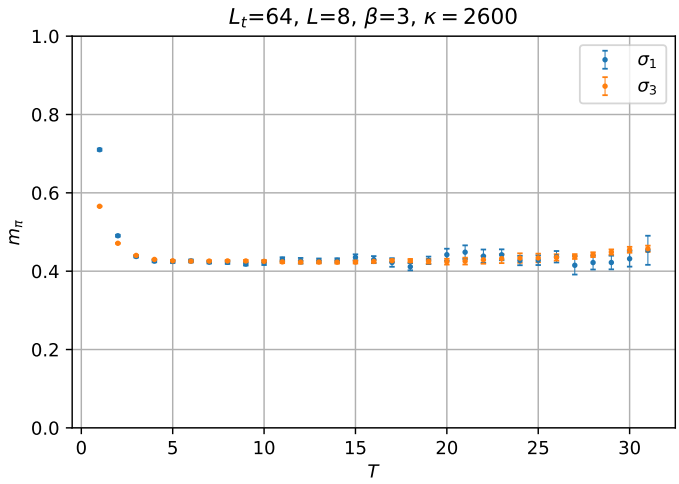


(d) Variance analysis

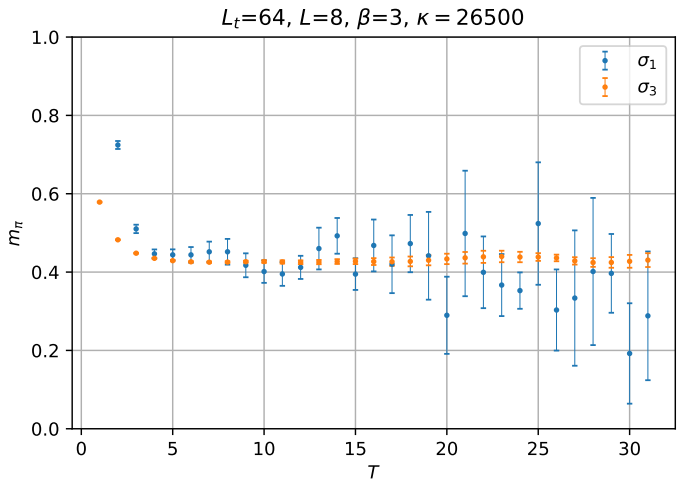
Figure 1: m_π vs. $(m^2_{\text{pcac}}g)^{1/3}$ for $\beta = 3$ and two different lattices. The pion mass was measured using σ_3.



(a)



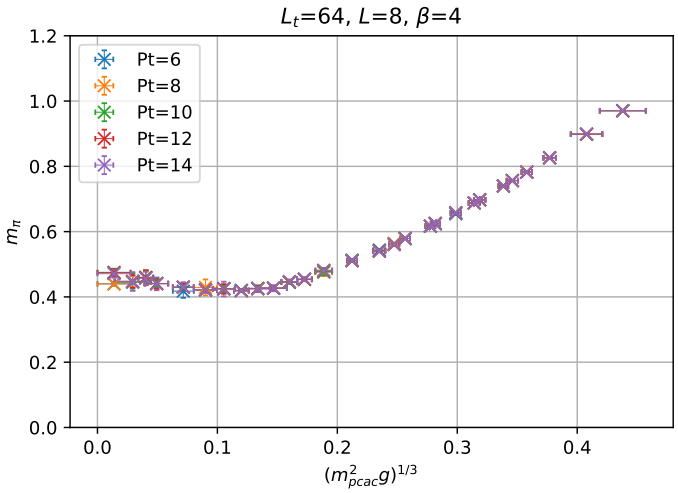
(b)



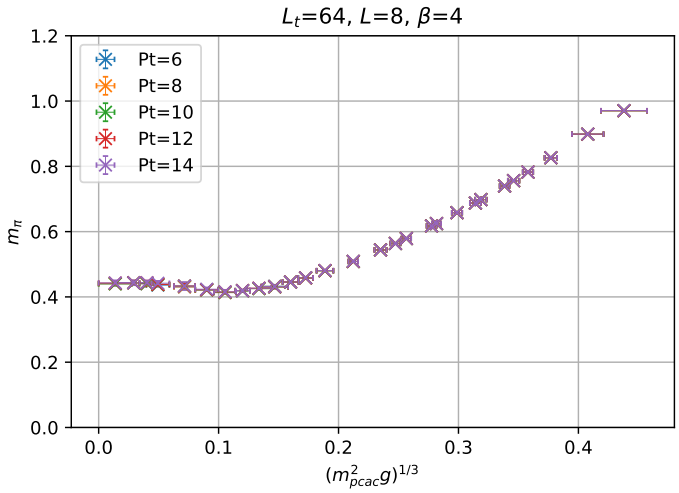
(c)

Figure 2: m_π vs. T, where T is the time distance between the lattice sites. $\kappa_c \approx 0.267$.

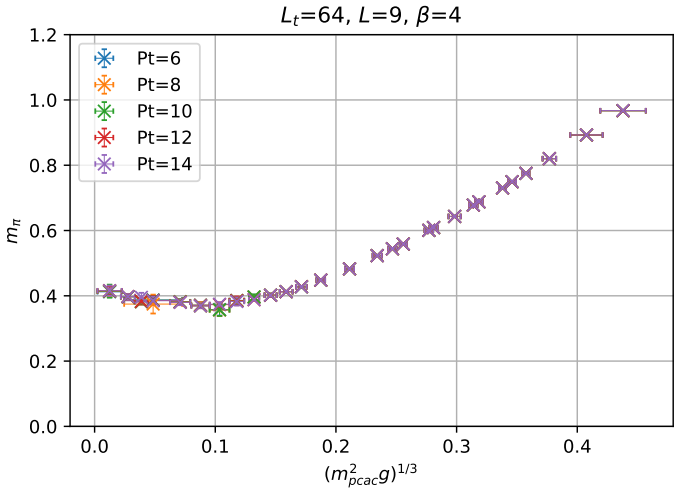
2 $\beta = 4$



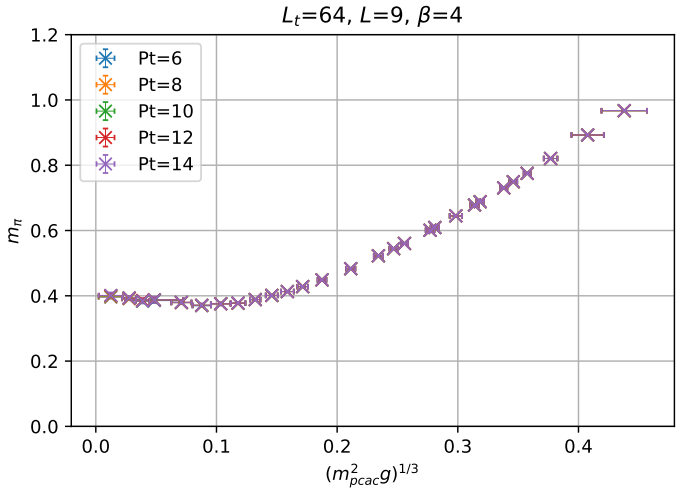
(a) Chi square analysis



(b) Variance analysis

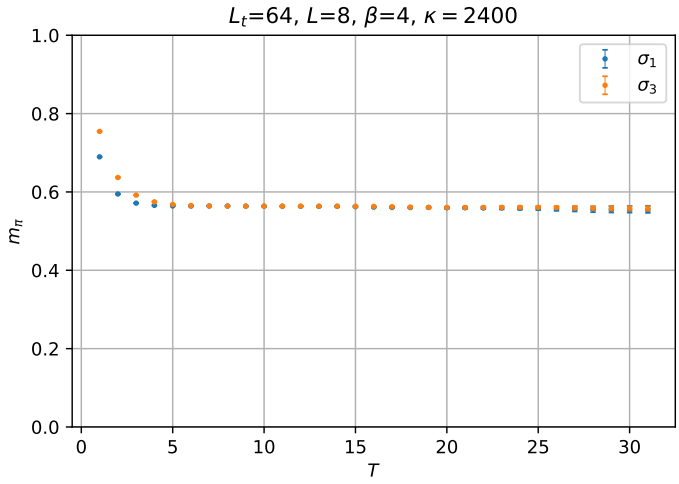


(c) Chi square analysis

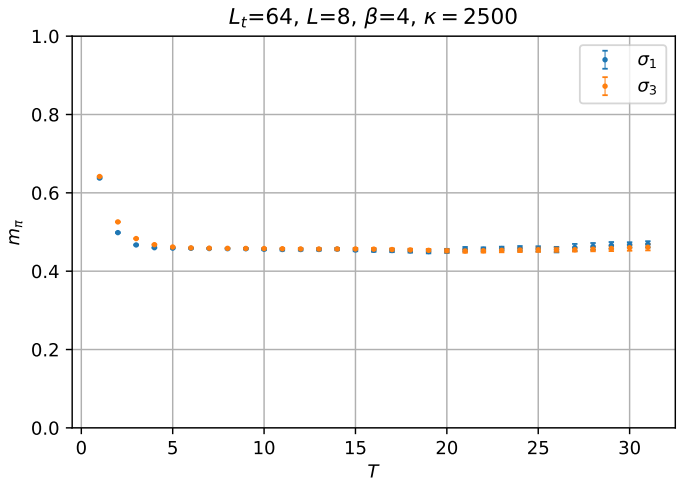


(d) Variance analysis

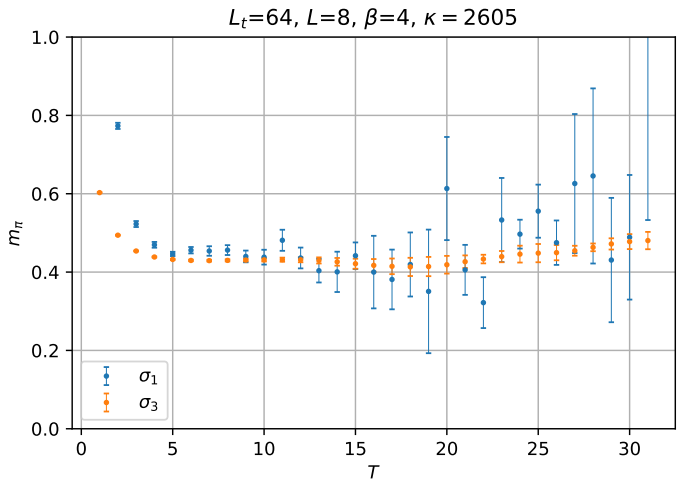
Figure 3: m_π vs. $(m^2_{\text{pcac}}g)^{1/3}$ for $\beta = 4$ and two different lattices. The pion mass was measured using σ_3.



(a)



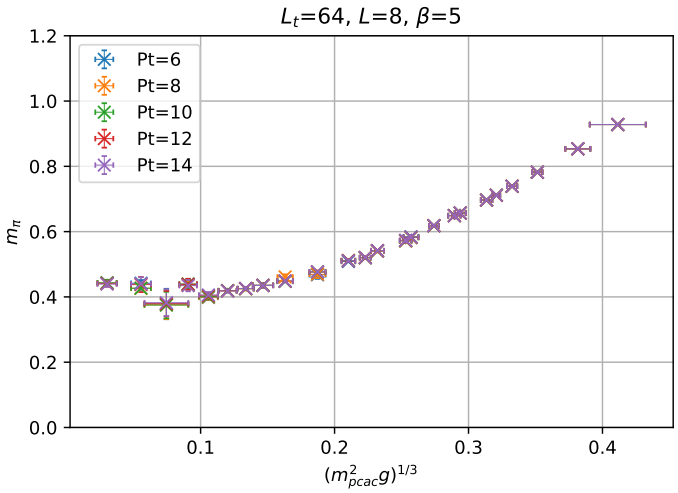
(b)



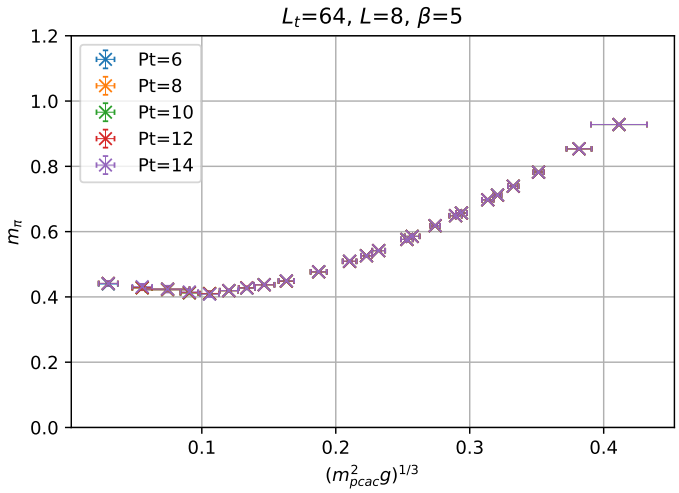
(c)

Figure 4: m_π vs. T, where T is the time distance between the lattice sites. $\kappa_c \approx 0.265$.

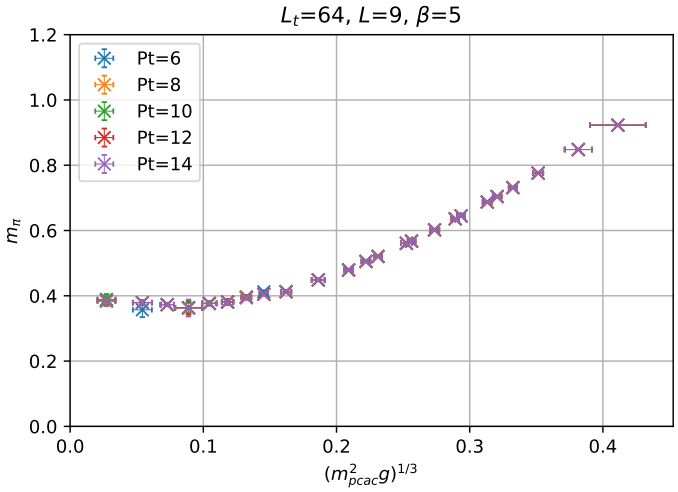
3 $\beta = 5$



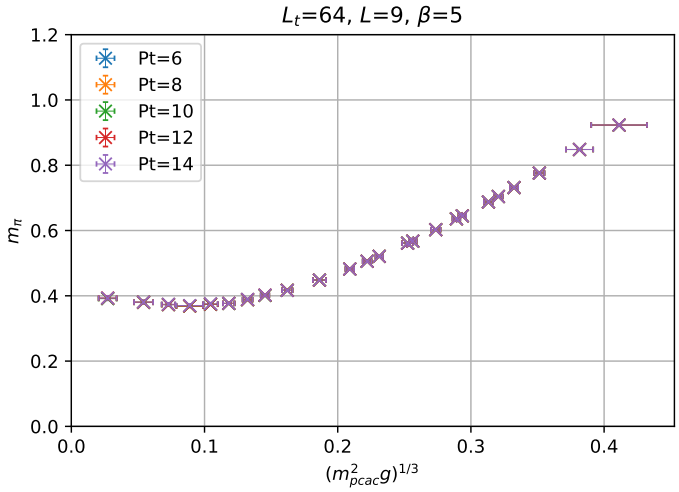
(a) Chi square analysis



(b) Variance analysis

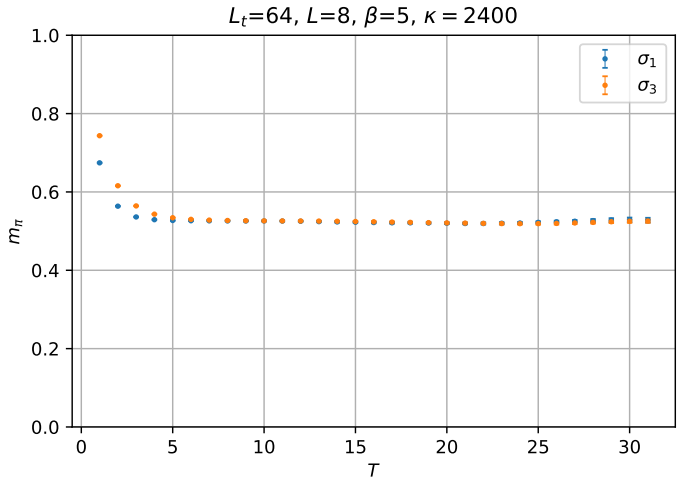


(c) Chi square analysis

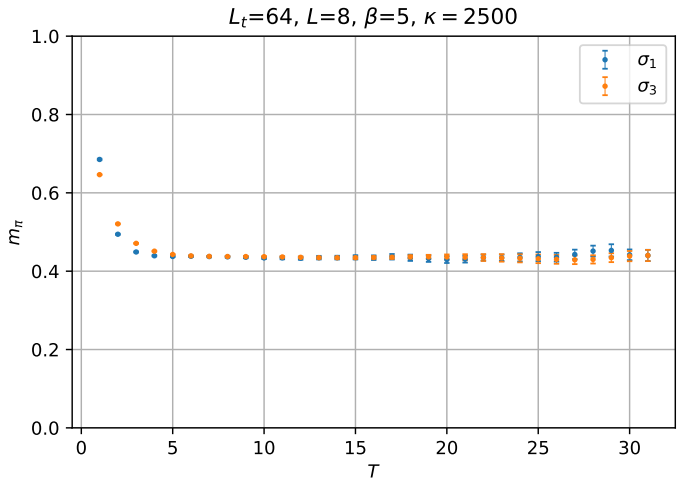


(d) Variance analysis

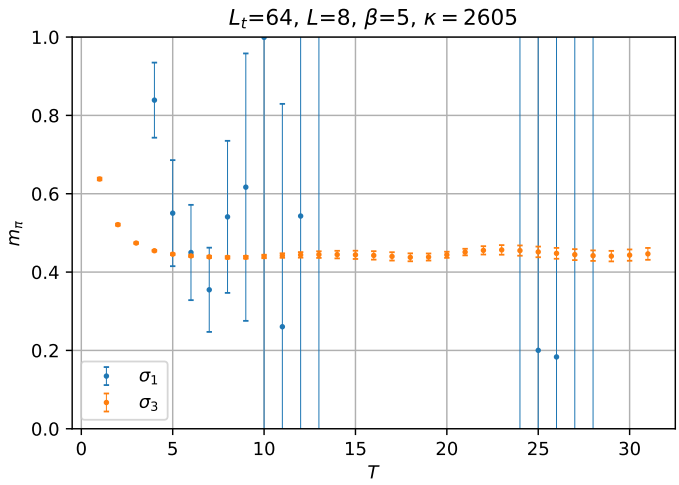
Figure 5: m_π vs. $(m^2_{\text{pcac}}g)^{1/3}$ for $\beta = 5$ and two different lattices. The pion mass was measured using σ_3.



(a)



(b)



(c)

Figure 6: m_π vs. T, where T is the time distance between the lattice sites. $\kappa_c \approx 0.262$.