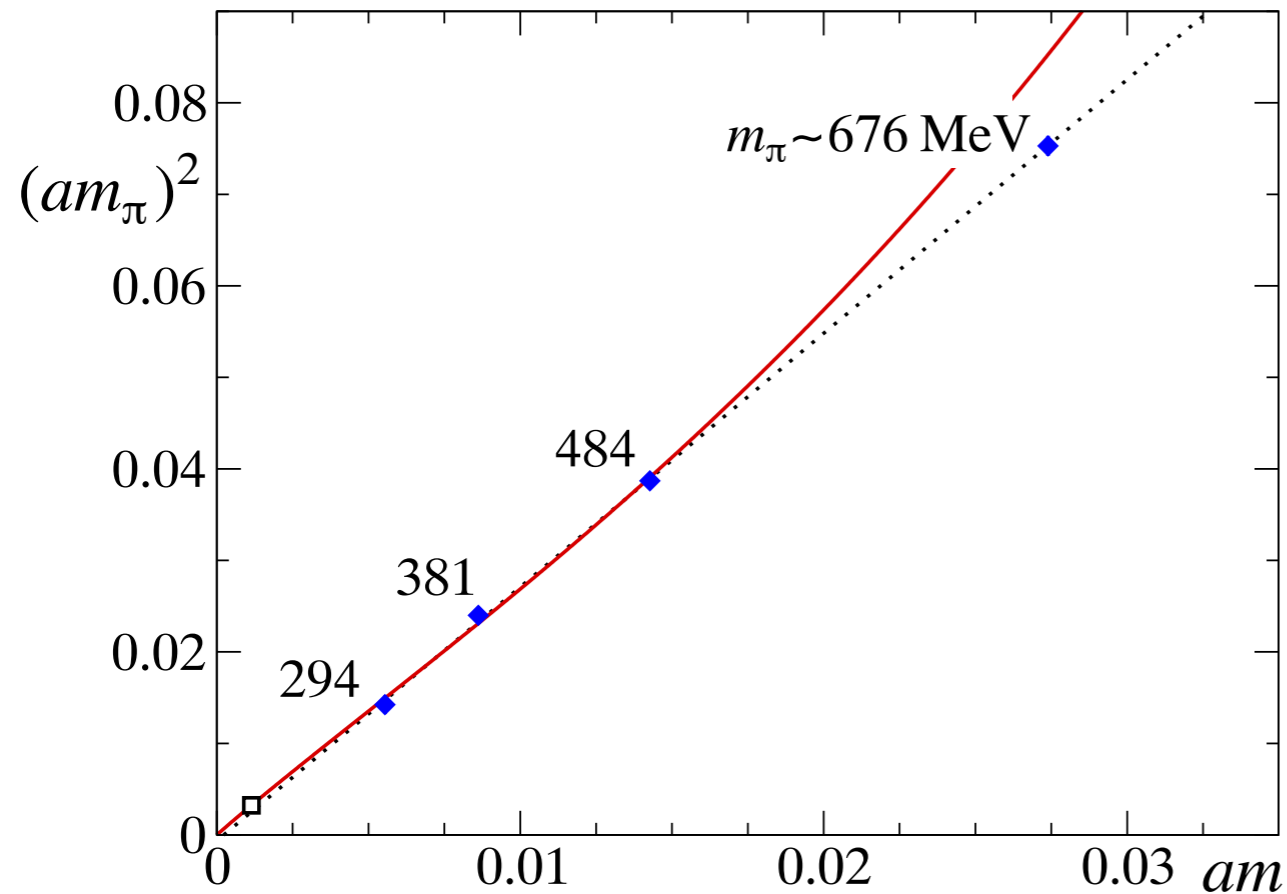
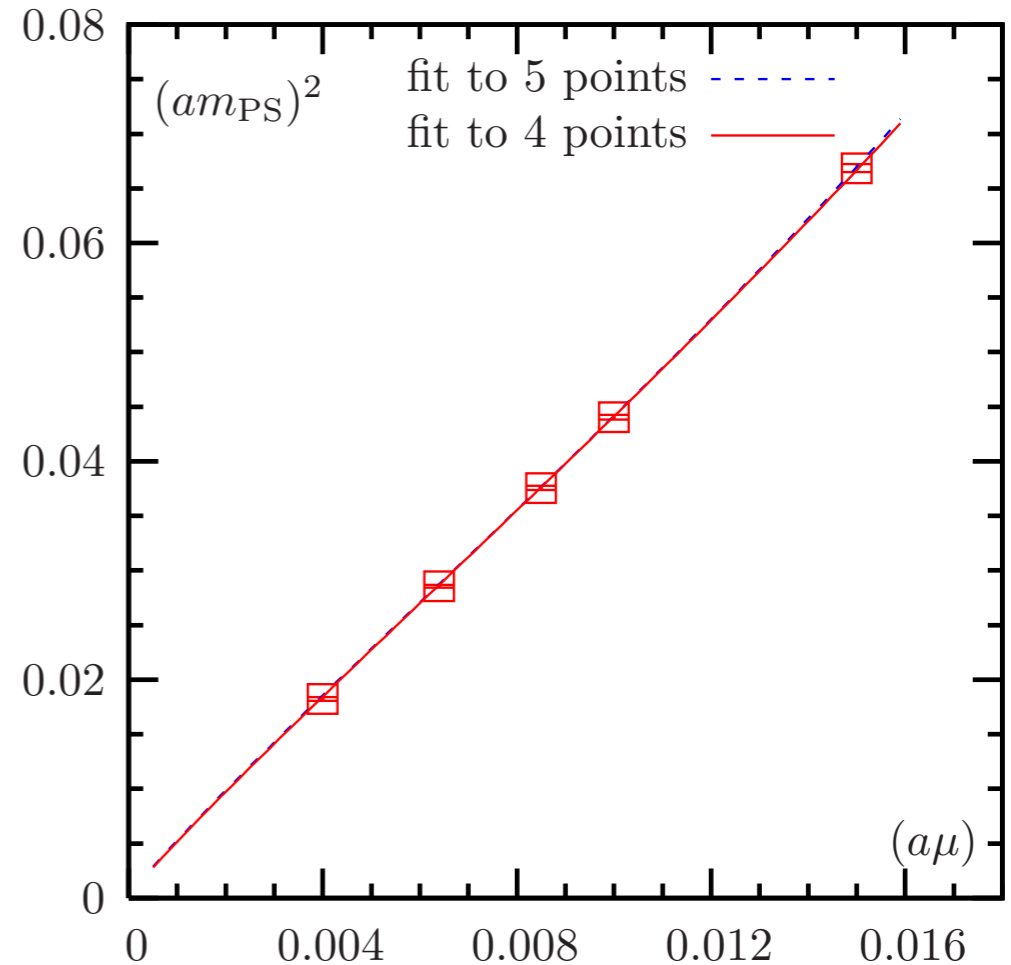


The plots that follow are from H. Leutwyler's lecture at the "School on flavor physics", Benasque, 2008.

# $M_\pi^2$ as a function of $m_q$



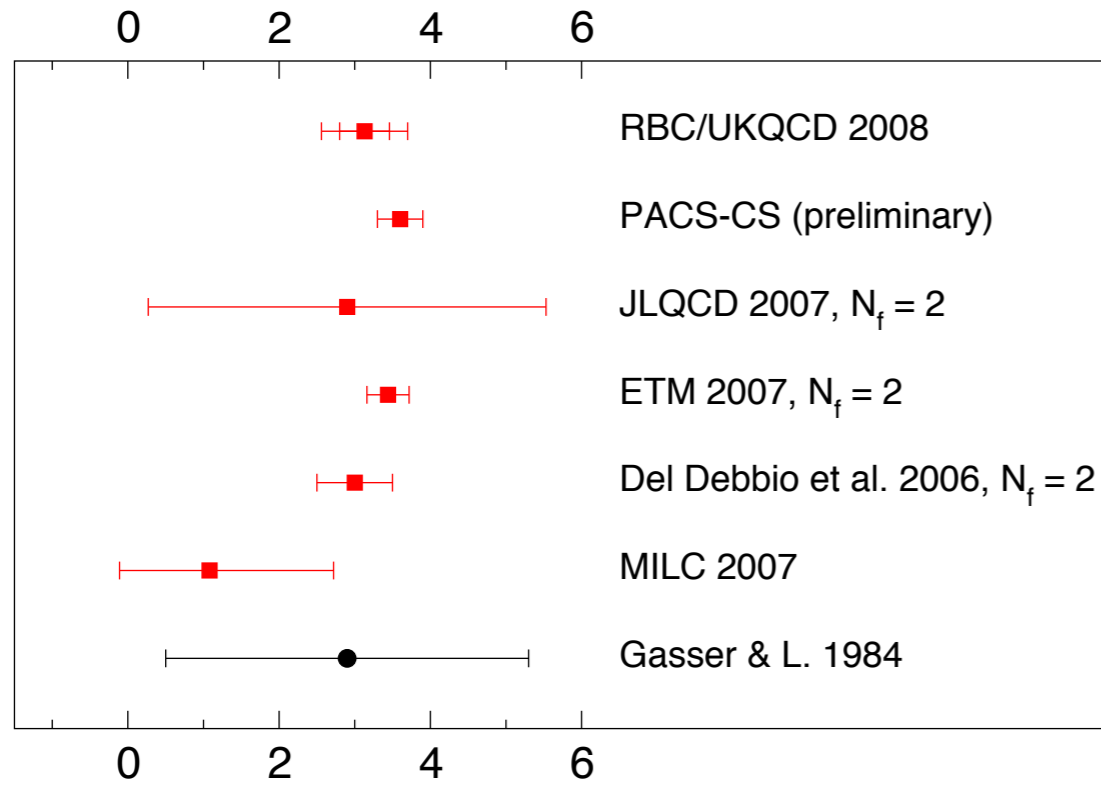
Lüscher, Lattice conference 2005



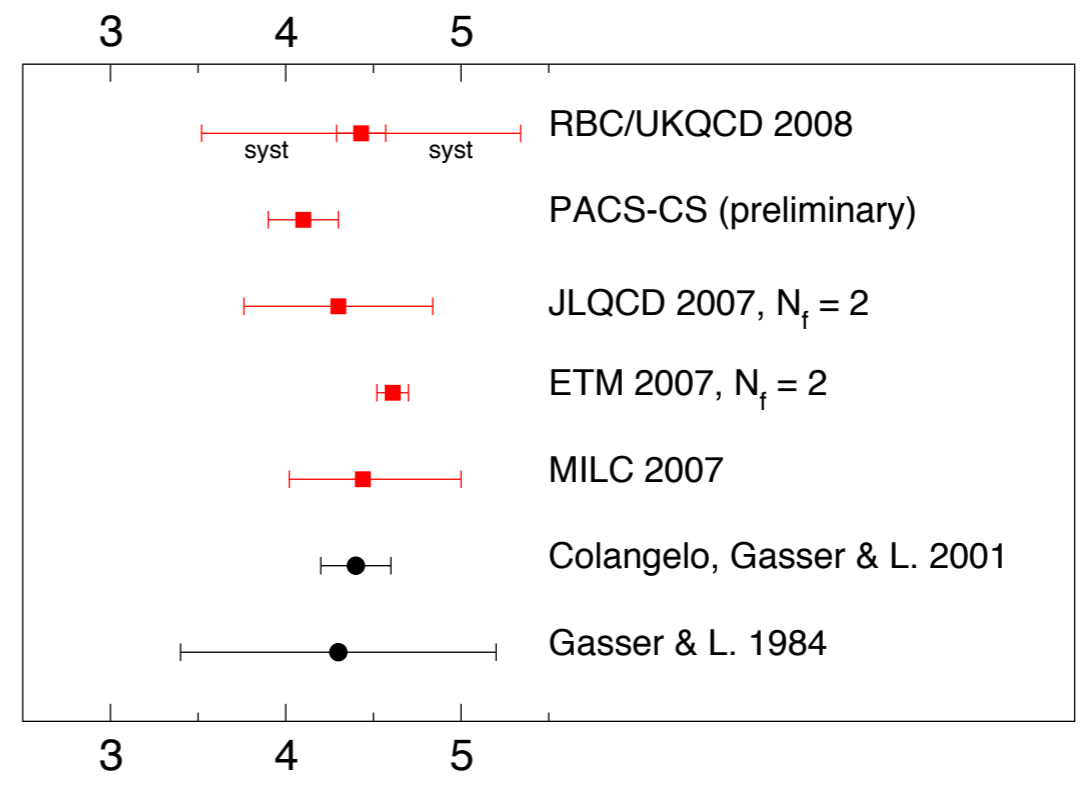
ETM collaboration, hep-lat/0701012

- Simulations with two light, dynamical quarks.

# Low energy constant $\ell_3$ and $\ell_4$

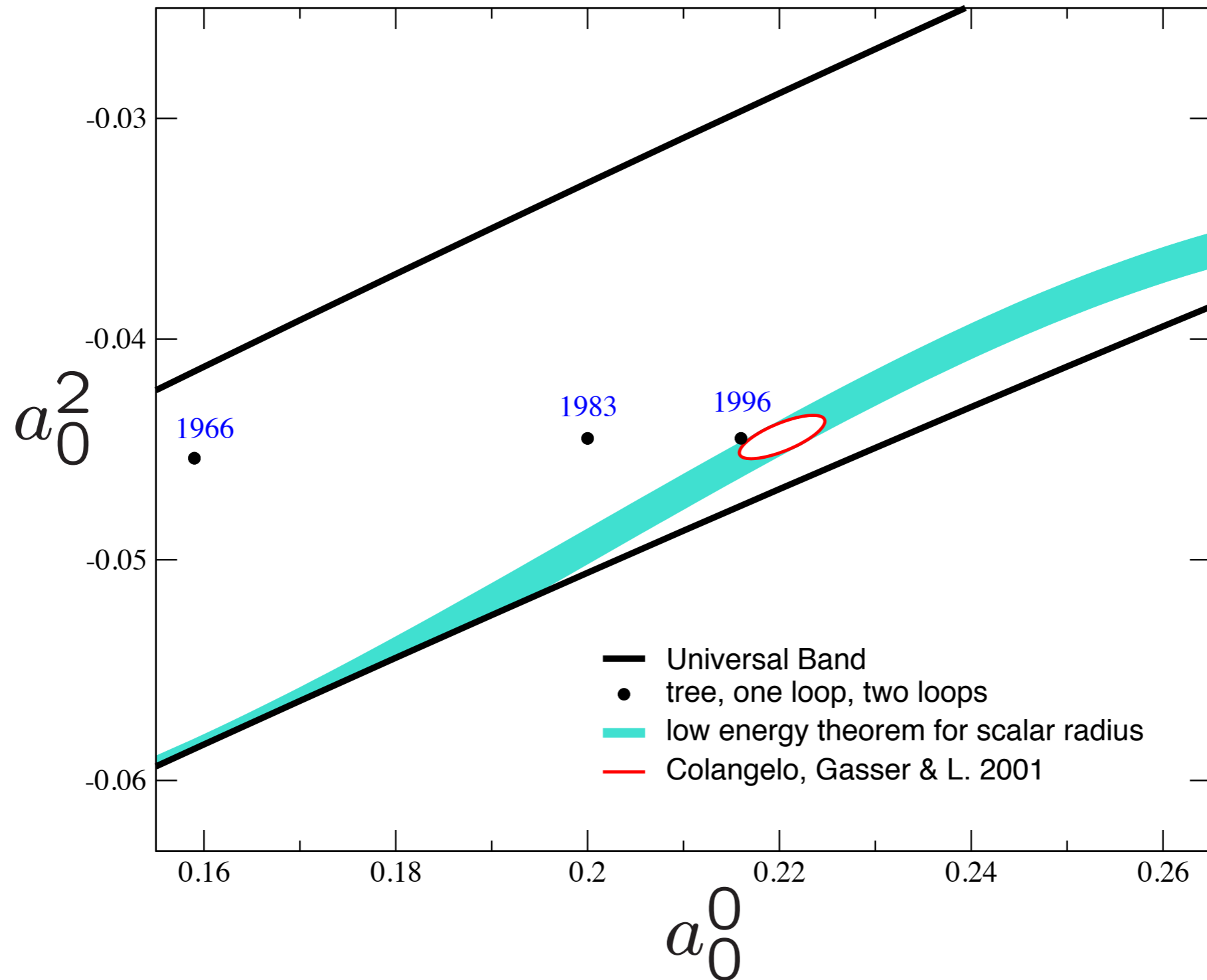


$$\bar{\ell}_3 \equiv \ln \frac{\Lambda_3^2}{M_\pi^2}$$

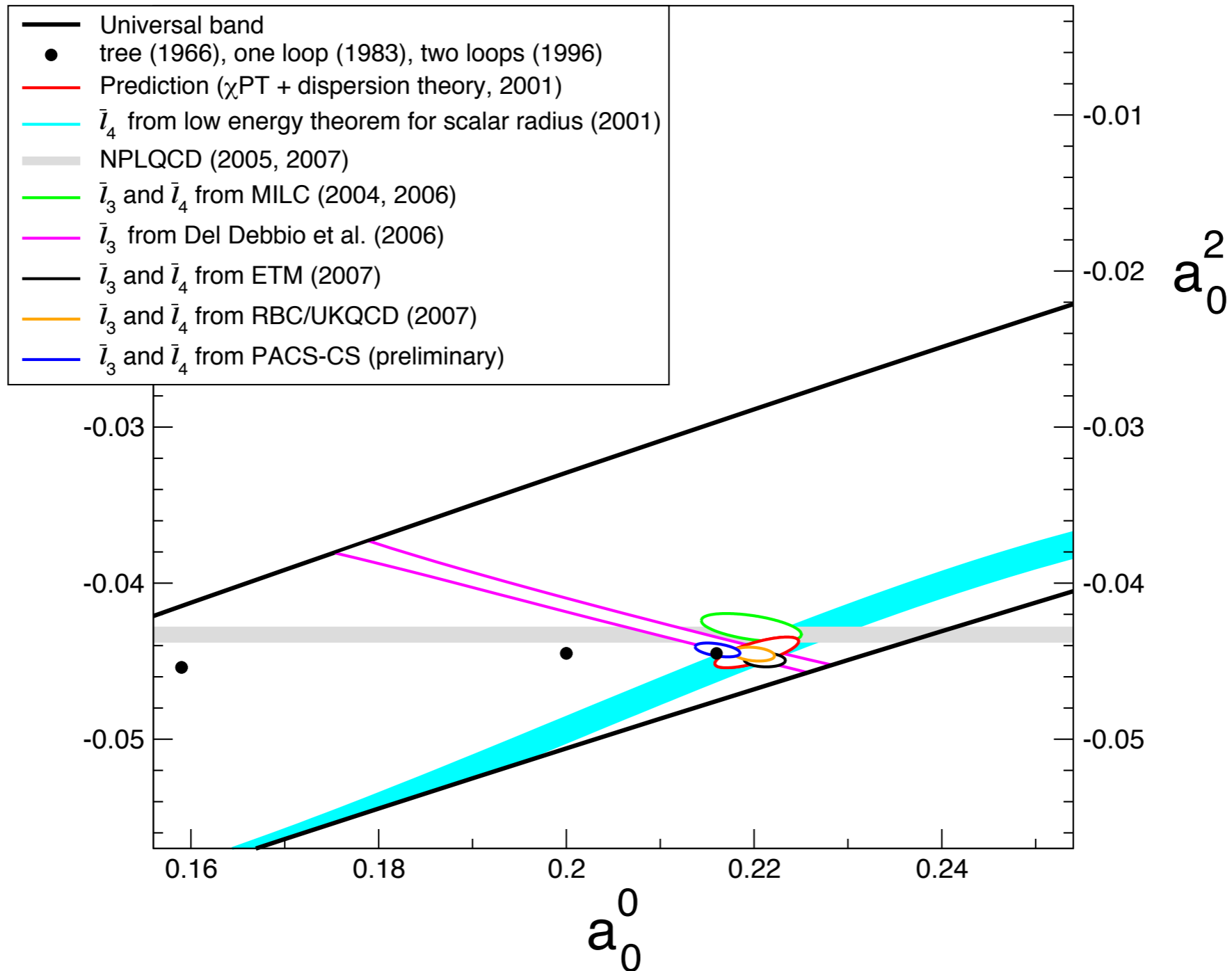


$$\bar{\ell}_4 = \ln \frac{\Lambda_4^2}{M_\pi^2}$$

# Scattering lengths $a_0^0$ $a_0^2$ from CHPT



# $a_0^0 a_0^2$ with $\ell_3$ and $\ell_4$ from lattice



# $a_0^0 a_0^2$ from experiment

