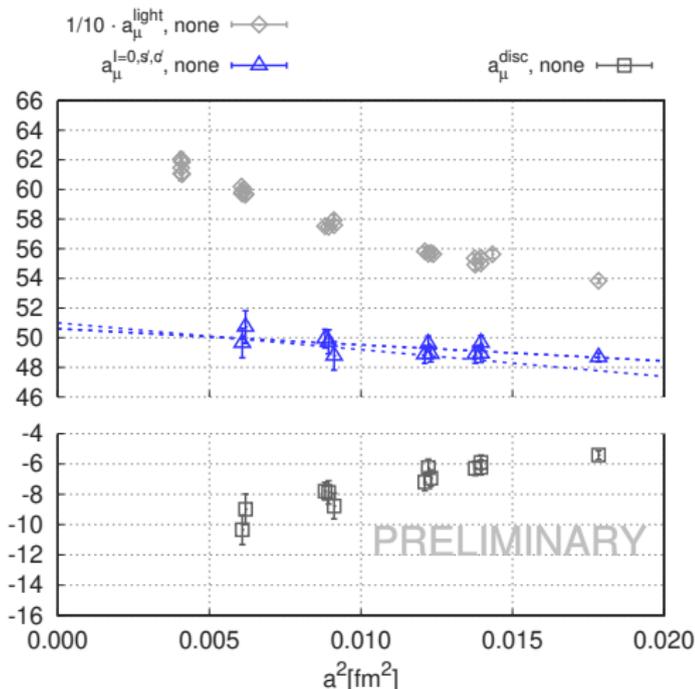


# Continuum extrapolation of $a_{\mu}^{l=0}$ (preliminary)

Many thanks to H. Meyer for his comment (Mainz '19)

$$a_{\mu}^{l=0} = \frac{1}{10} a_{\mu}^{\text{light}} + a_{\mu}^{\text{s}} + a_{\mu}^{\text{disc}}$$

- No two-pion contributions to  $a_{\mu}^{l=0}$ , only three-pion ones  
⇒ long-distance taste-breaking effects only appear at  $O(p^{10})$  in  $\chi_{\text{PT}}$
- $a_{\mu}^{\text{s}}$  no included so as not to dilute taste-breaking effects
- Consistently describe taste-breaking in  $a_{\mu}^{\text{light}}$  and  $a_{\mu}^{\text{disc}}$
- All  $l=0$  points are in error band of  $\frac{1}{10} a_{\mu, \text{cont}}^{\text{light}} + a_{\mu, \text{cont}}^{\text{disc}}$   
⇒ we do not underestimate errors
- Small remaining discretization errors are well described by polynomial in  $a^2$



# Continuum extrapolation of $a_{\mu}^{I=0}$ (preliminary)

$$a_{\mu}^{I=0} = \frac{1}{10} a_{\mu}^{\text{light}} + a_{\mu}^{\text{s}} + a_{\mu}^{\text{disc}}$$

- No two-pion contributions to  $a_{\mu}^{I=0}$ , only three-pion ones  
 $\Rightarrow$  long-distance taste-breaking effects only appear at  $O(p^{10})$  in  $\chi\text{PT}$
- $a_{\mu}^{\text{s}}$  not included so as not to dilute taste-breaking effects
- Consistently describe taste-breaking in  $a_{\mu}^{\text{light}}$  and  $a_{\mu}^{\text{disc}}$
- All  $I=0$  points are in error band of  $\frac{1}{10} a_{\mu,\text{cont}}^{\text{light}} + a_{\mu,\text{cont}}^{\text{disc}}$   
 $\Rightarrow$  we do not underestimate errors
- Small remaining discretization errors are well described by polynomial in  $a^2$

