Effective mass

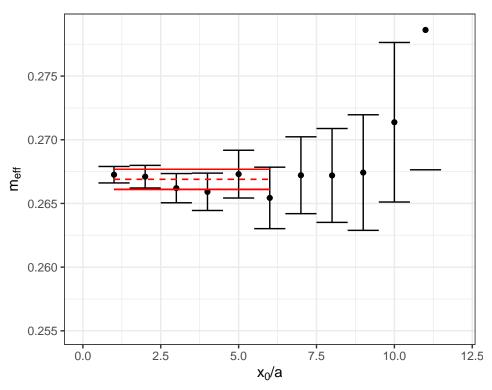
MG

T 24 L 6

$$m_0^2 = -4.9$$
 $m_1^2 = -4.9$ $\lambda_0^2 = 2.5$ $\lambda_1^2 = 2.5$ $\mu^2 = 5$ $g^2 = 0$ replica = 0

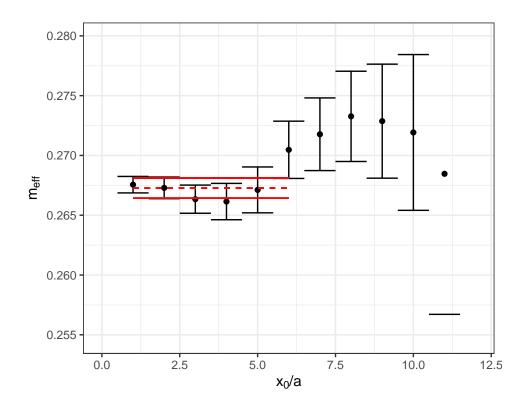
 $index\ n=0$

fit: $m_{eff} = 0.266896 \pm 0.000787$



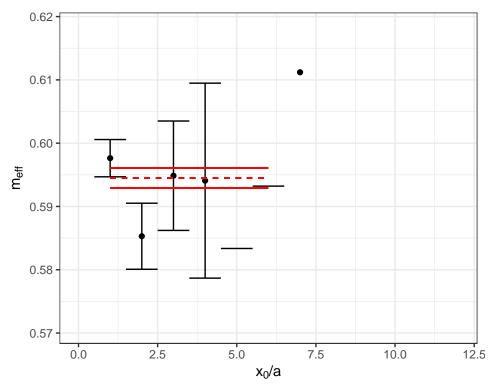
 $\mathrm{index}\ \mathrm{n}{=}\ 1$

fit: $m_{eff} = 0.267266 \pm 0.000839$



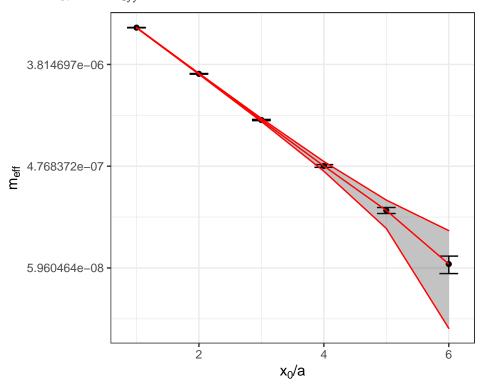
Two particle energy index n=0

fit: $m_{eff} = 0.594487 \pm 0.001585$



index n = 1

Three particle energy $\,$ fit: $m_{eff} = 0.943337 \pm 0.007287$

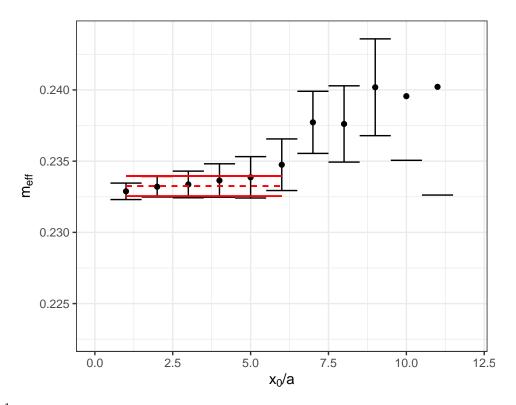


T 24 L 8

$$m_0^2 = -4.9 \quad m_1^2 = -4.9 \quad \lambda_0^2 = 2.5 \quad \lambda_1^2 = 2.5 \quad \mu^2 = 5 \quad g^2 = 0 \quad \text{replica} = 0$$

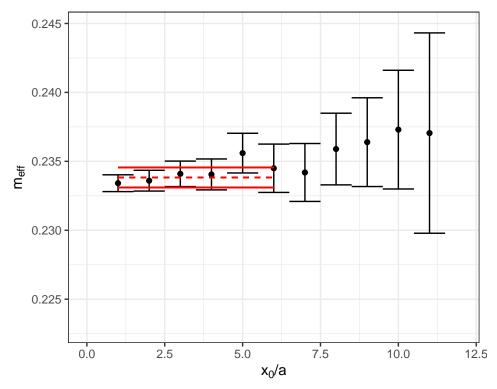
index n = 0

fit: $m_{eff} = 0.233247 \pm 0.000704$



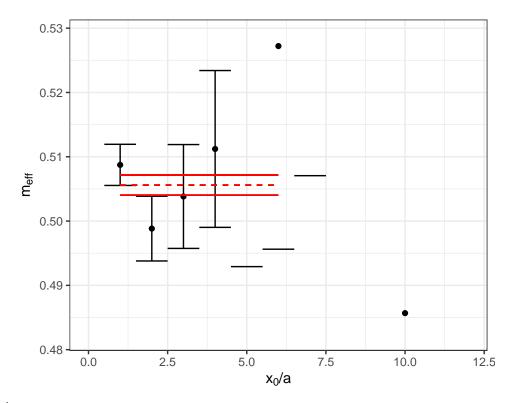
 $\mathrm{index}\ \mathrm{n}{=}\ 1$

fit: $m_{eff} = 0.233833 \pm 0.000728$



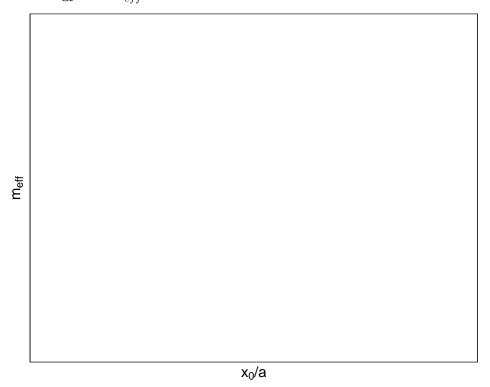
Two particle energy index n=0

fit: $m_{eff} = 0.505590 \pm 0.001560$



 $\mathrm{index}\ \mathrm{n}{=}\ 1$

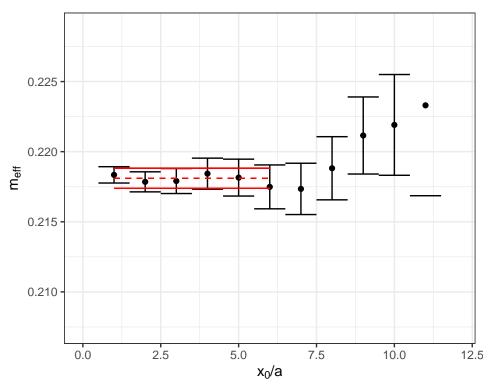
Three particle energy $\,$ fit: $m_{eff} = 0.524375 \pm 0.002457$



$\mathbf{T}\ \mathbf{24}\ \mathbf{L}\ \mathbf{10}$

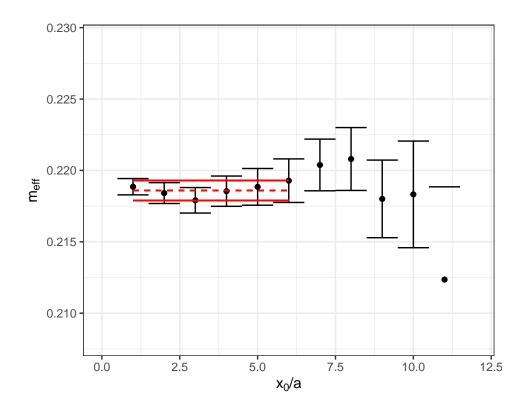
$$m_0^2 = -4.9 \quad m_1^2 = -4.9 \quad \lambda_0^2 = 2.5 \quad \lambda_1^2 = 2.5 \quad \mu^2 = 5 \quad g^2 = 0 \quad \text{replica} = 0$$
 index n= 0

fit: $m_{eff} = 0.218105 \pm 0.000715$



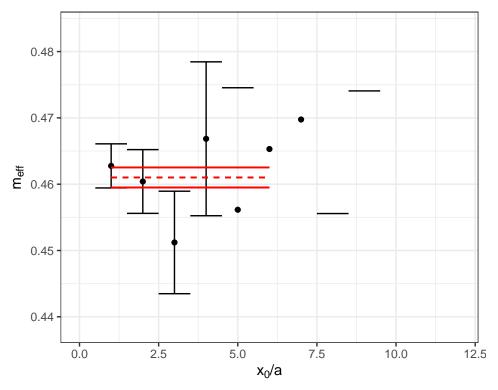
 $\mathrm{index}\ \mathrm{n}{=}\ 1$

fit: $m_{eff} = 0.218597 \pm 0.000702$



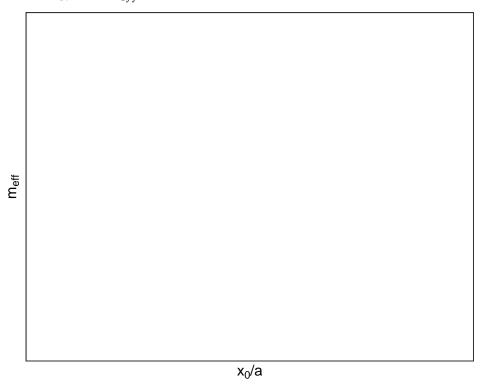
Two particle energy index n=0

fit: $m_{eff} = 0.461023 \pm 0.001512$



index n = 1

Three particle energy $\,$ fit: $m_{eff} = 0.473909 \pm 0.002439$



| L | Т | meff0 | Emeff0 | meff1 | Emeff1 | E2 | E2err | Е3 | E3err |
|----|----|-----------|-----------|------------|-----------|-----------|-----------|-------|------------------------------|
| 6 | 24 | 0.2668961 | 0.0007874 | 0.2672665 | 0.0008387 | 0.5944866 | 0.0015848 | 0.943 | 3374546172080072868252755193 |
| 8 | 24 | 0.2332467 | 0.0007041 | 0.2338333 | 0.0007275 | 0.5055902 | 0.0015598 | NaN | NaN |
| 10 | 24 | 0.2181055 | 0.0007153 | 30.2185968 | 0.0007025 | 0.4610234 | 0.0015125 | NaN | NaN |

to be compared with the result of the paper https://arxiv.org/ab $\rm s/1806.02367$

| $\overline{\mathrm{V1}}$ | V2 | V3 | V4 | V5 | V6 | V7 | V8 | V9 |
|--------------------------|----|-------|-------------|------------|------------|------------|------------|----------|
| $\overline{ m L}$ | Т | nconf | ML | E2(L) | E3(L) | E2 | E3 | E3/ E2 |
| 4 | 24 | 18000 | 0.3634(16) | _ | _ | _ | _ | _ |
| 5 | 24 | 28000 | 0.3049(13) | 0.6790(20) | 1.1121(93) | 0.0692(24) | 0.1973(97) | 2.85(12) |
| 6 | 24 | 7500 | 0.2684(24) | 0.5920(36) | 0.962(16) | 0.0552(46) | 0.156(17) | 2.83(26) |
| 7 | 24 | 30000 | 0.2479(12) | 0.5378(17) | 0.8669(74) | 0.0420(23) | 0.1233(79) | 2.93(17) |
| 8 | 24 | 47000 | 0.2355(10) | 0.5035(13) | 0.8006(57) | 0.0325(18) | 0.0941(62) | 2.90(17) |
| 9 | 24 | 40000 | 0.2247(11) | 0.4756(14) | 0.7574(62) | 0.0261(20) | 0.0832(67) | 3.19(24) |
| 10 | 24 | 70000 | 0.21843(85) | 0.4565(11) | 0.7103(46) | 0.0196(15) | 0.0550(50) | 2.80(23) |
| 11 | 24 | 30000 | 0.2142(13) | 0.4464(17) | 0.6859(71) | 0.0181(23) | 0.0434(77) | 2.40(37) |
| 12 | 24 | 12000 | 0.2095(21) | 0.4367(26) | 0.672(11) | 0.0177(37) | 0.043(12) | 2.43(60) |
| 13 | 24 | 20000 | 0.2088(16) | 0.4271(21) | 0.6546(91) | 0.0095(28) | 0.0282(98) | 2.97(97) |
| 14 | 24 | 28000 | 0.2054(22) | 0.4236(28) | 0.650(13) | 0.0127(38) | 0.034(14) | 2.64(96) |
| 15 | 24 | 40000 | 0.2057(12) | 0.4199(15) | 0.6362(66) | 0.0086(20) | 0.0192(70) | 2.23(72) |
| 16 | 24 | 52000 | 0.2045(14) | 0.4179(18) | 0.6347(83) | 0.0089(25) | 0.0211(88) | 2.37(88) |
| 17 | 24 | 70000 | 0.20540(87) | 0.4181(11) | 0.6388(50) | 0.0073(15) | 0.0226(54) | 3.11(71) |
| 18 | 24 | 36000 | 0.2051(12) | 0.4134(16) | 0.6371(71) | 0.0032(21) | 0.0218(76) | 6.8(4.0) |

| $\overline{V1}$ | V2 | V3 | V4 | V5 | V6 | V7 | V8 | V9 |
|-----------------|----|--------|-------------|-------------|------------|-------------|------------|----------|
| 20 | 24 | 70000 | 0.20477(87) | 0.4114(11) | 0.6241(52) | 0.0018(15) | 0.0098(55) | 5.4(4.1) |
| 14 | 48 | 36000 | 0.20724(33) | 0.42461(63) | 0.6530(23) | 0.01014(62) | 0.0313(24) | 3.09(20) |
| 24 | 48 | 100000 | 0.20426(55) | 0.4118(11) | 0.6194(58) | 0.0032(10) | 0.0066(59) | 2.0(1.7) |