

## K<sub>4</sub> Tetrahedron Lattice

Vertices: V = 4  
 Edges: E = 6  
 Euler char:  $\chi = 2$

Centroid distance:  
 $r/a = \sqrt{(3/8)} \approx 0.612$

Solid angle per vertex:  
 $\Omega = \arccos(-1/3) \approx 109.47^\circ$

Total coverage:  
 $4\Omega \approx 4\pi$  (complete)

## Geometric Formulas for B

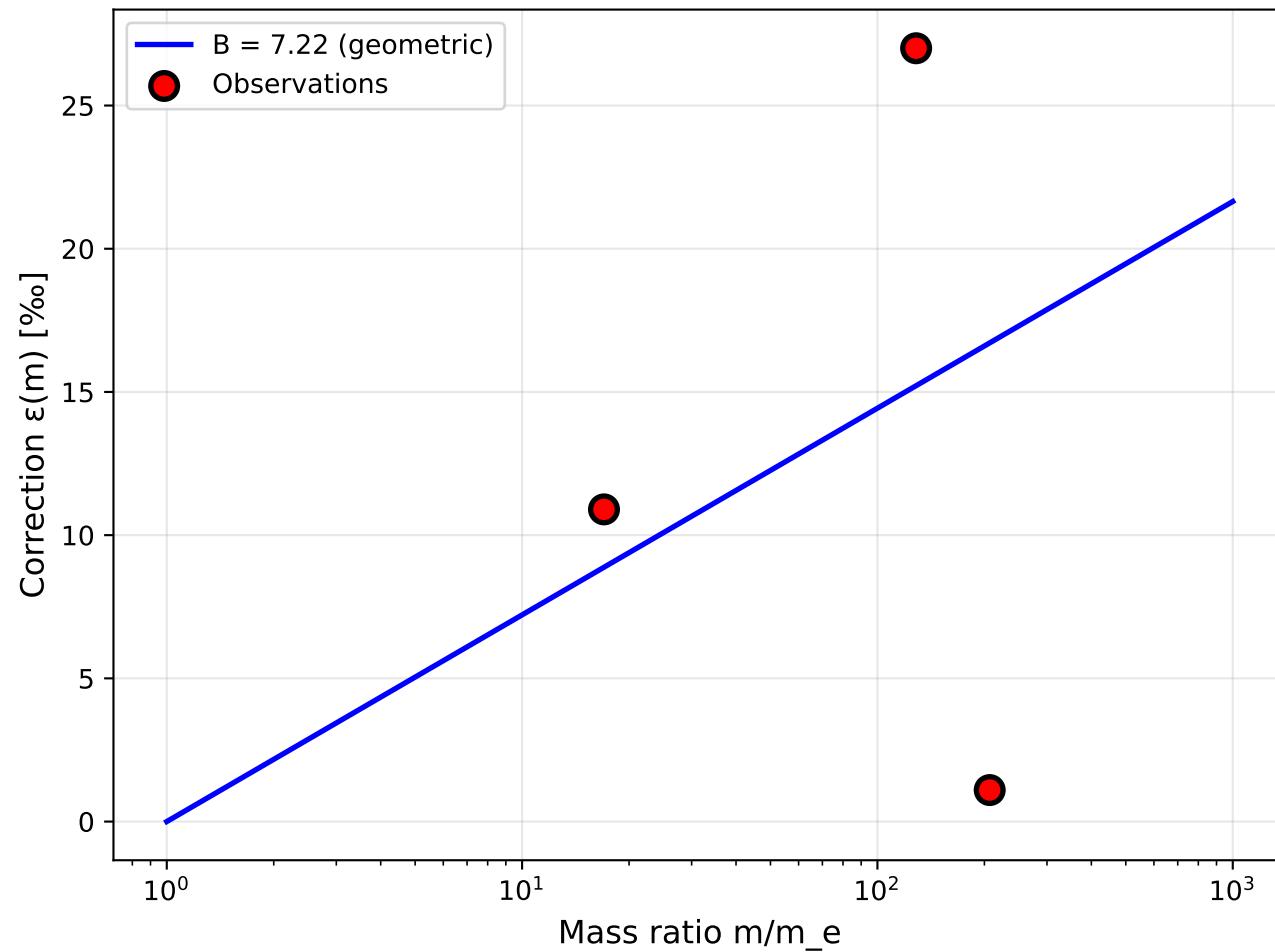
$$E + (\chi/\pi)\Omega = 7.22 \quad \Delta = 0.26$$

$$4\Omega = 7.64 \quad \Delta = 0.68$$

$$(E+V)/\chi = 5.00 \quad \Delta = 1.96$$

Target:  $B = 6.96$  (empirical)

## Geometric Prediction vs Observations



## Geometric Formula Candidates

