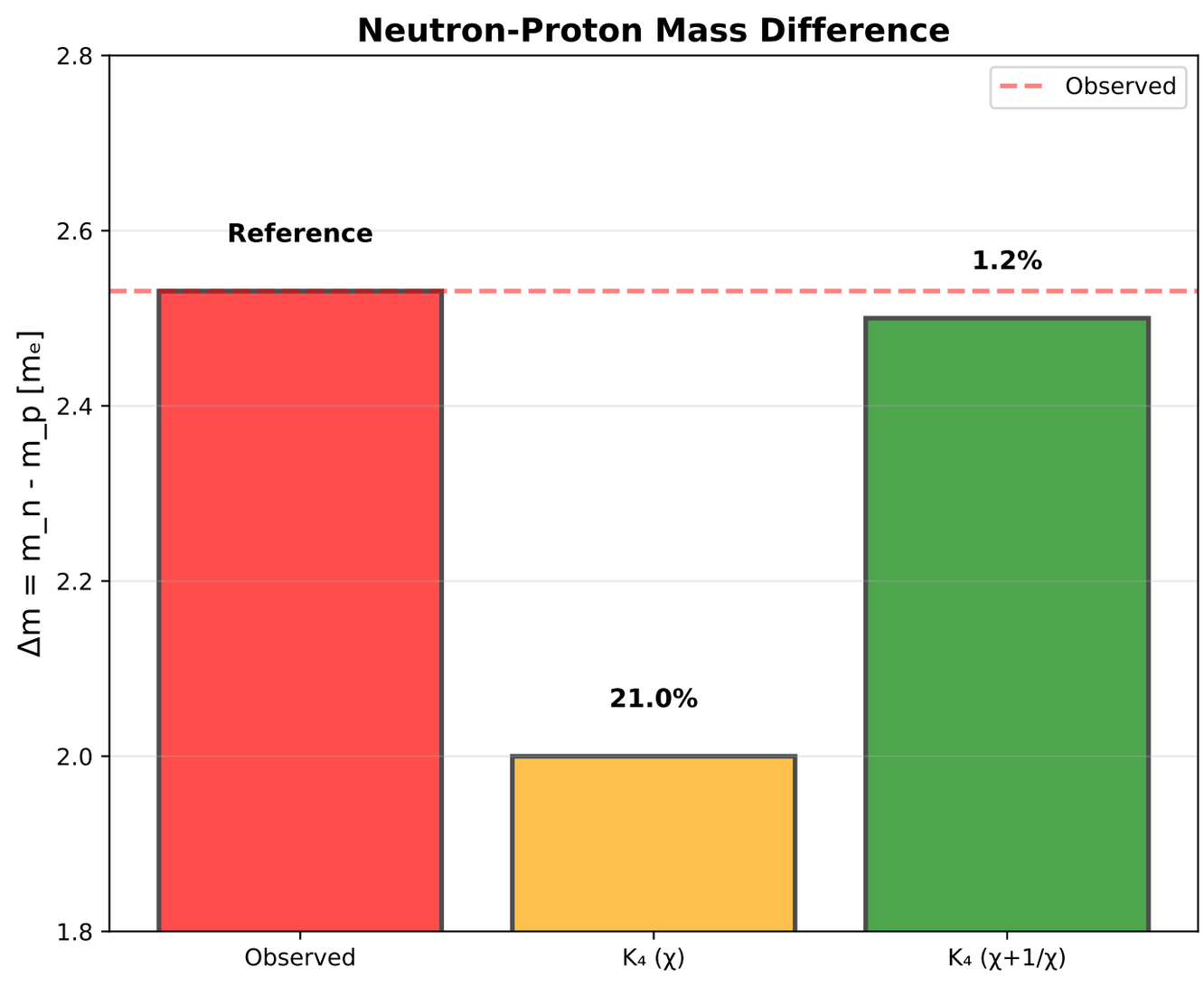


```
NEUTRON-PROTON MASS DIFFERENCE

K₄ STRUCTURE:
  V = 4 (vertices)
  E = 6 (edges)
  χ = 2 (Euler characteristic)

PROTON (exact):
  m_p/m_e = 1836 = 9 × 6 × F₂

NEUTRON (OLD):
  m_n/m_e = 1836 + χ = 1838
  Δm = 2.0 mₑ
  Error: 21.0%

NEUTRON (NEW):
  m_n/m_e = 1836 + χ + 1/χ
          = 1836 + 2 + 1/2
          = 1838.5
  Δm = 2.5 mₑ = 1.277 MeV
  Error: 1.22%

OBSERVED:
  Δm = 2.531 mₑ = 1.293 MeV

IMPROVEMENT: 17.1× better!
```