Electroweak Series

W, Z, and Higgs Boson Structures

Neutral sea solitons without central CPs

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Abstract

Documents W/Z/Higgs as neutral DP aggregates (no central CP). W: ribbon chain of 6 hDPs (80.4 GeV). Z: icosahedral cage ~180 vertices (91.2 GeV). Higgs: dodecahedral cage ~3000 vertices (125.3 GeV). Mass mechanisms differ by structure.

1. W Boson

Linear chain of 6 hybrid DPs, closed ribbon loop. Mass from linear ZBW only (80.379 GeV). Open structure enables beta decay catalysis.

2. Z Boson

Icosahedral cage ~180 vertices, symmetric 25% DP mix. E_inter dominant + cloud (91.1876 GeV). Closed structure: neutral, unreactive.

3. Higgs Boson

Dodecahedral cage ~3000 vertices, uniform 25% DP mix. Cloud-dominant mass (125.25 GeV). Provides mass to W/Z via sea interaction. Production via SSV localization.

References

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