

The Golden Angle Connection

Half-octave (4 bp) = One Golden Angle of DNA Rotation

DNA Helix
10.5 bp/turn

4 bp = 137°
≈ Golden Angle
(137.5°)

Golden Angle (small) = $360^\circ / \varphi^2 \approx 137.5^\circ$
4 bp rotation = $4/10.5 \times 360^\circ = 137.1^\circ$
Half-octave = Golden angle alignment