

Chiral Vortex along W- \bar{W} Axis: $\chi_{\text{total}} = 0$ Where $P_R = P_G = P_B$

T₊ (R,G,B,W)

T₋ ($\bar{R},\bar{G},\bar{B},\bar{W}$)

Vortex core (W- \bar{W} axis)

Center (origin)

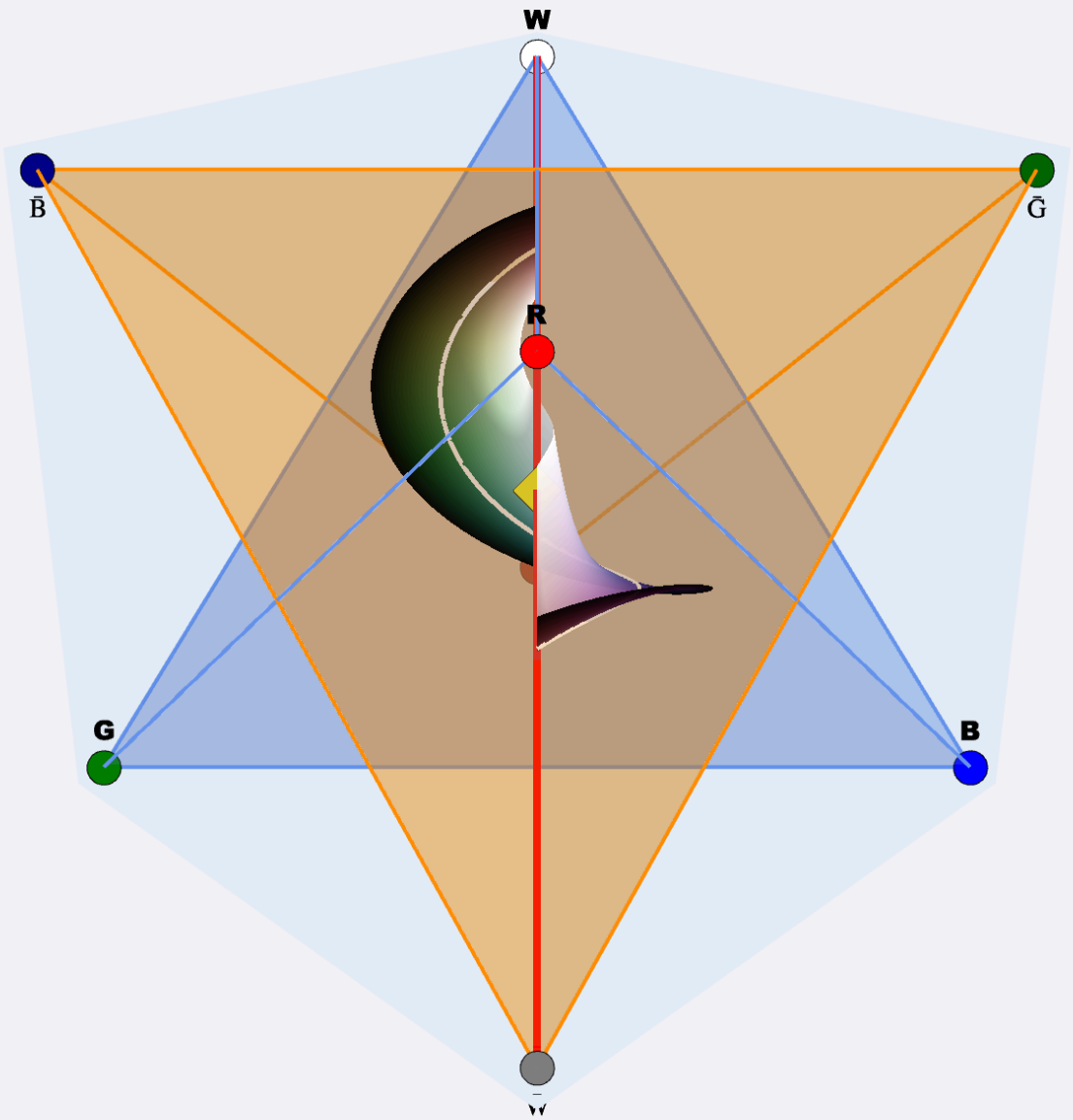
Winding loop (2 π)

Stella Octangula ∂S (Def 0.1.1):

T₊ (blue): R, G, B, W vertices

T₋ (orange): $\bar{R}, \bar{G}, \bar{B}, \bar{W}$ (antipodal)

$v_{\bar{c}} = -v_c$ for all colors



Vortex along W- \bar{W} axis:

$\chi_{\text{total}} = 0$ where $P_R = P_G = P_B$

This is the line $(t,t,-t) \propto W-\bar{W}$

Phase cancellation: $1 + \omega + \omega^2 = 0$

W- \bar{W} axis (singlet direction):

$W = (-1,-1,1)/\sqrt{3}$ (white vertex)

$\bar{W} = (1,1,-1)/\sqrt{3}$ (anti-white)

Perpendicular to R-G-B plane