

Skyrmion (Baryon) as Hedgehog: $\hat{n} = \hat{r}$, $Q = 1$

8% $|\chi|$

20% $|\chi|$

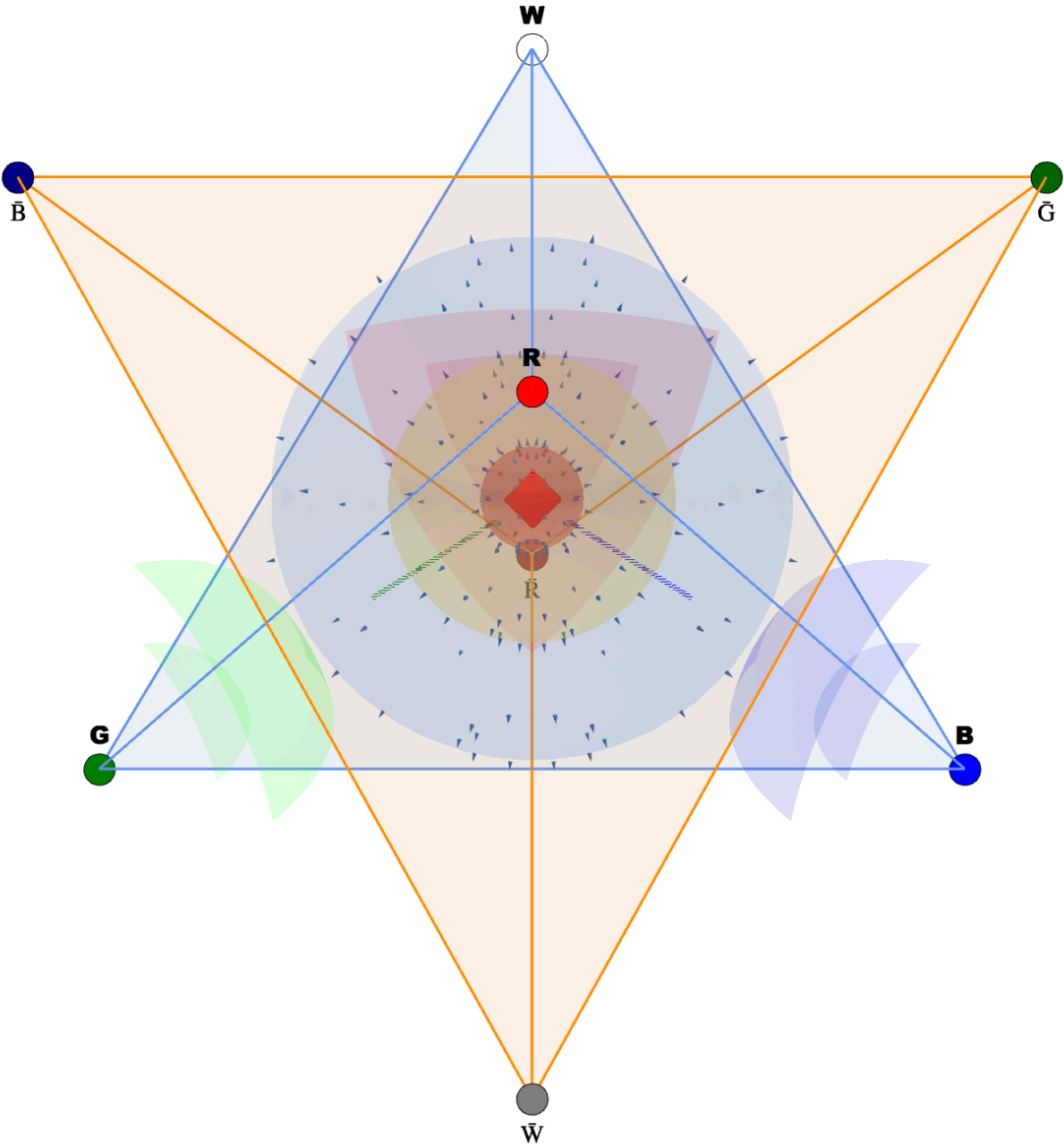
Baryon center ($Q=1$)

→ R (color field)

→ G (color field)

→ B (color field)

Hedgehog Ansatz (Thm 4.1.1):
 $\hat{n}(x) = \hat{r}$ (isospin = radial)
 $f(0) = n, f(\infty) = 0$
Baryon = skyrmion with $Q = 1$



Color fields:
 χ_R, χ_G, χ_B peak at vertices
Amplitude differences → isospin
Dotted lines show color directions