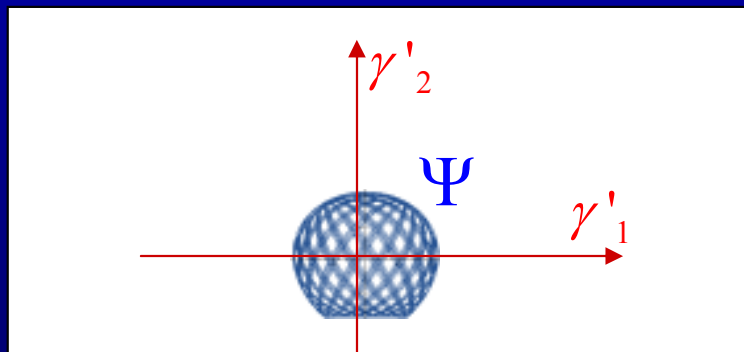
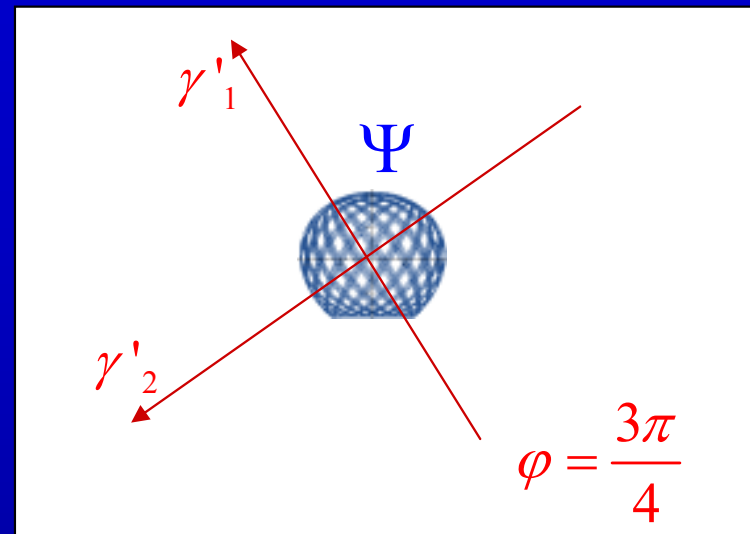
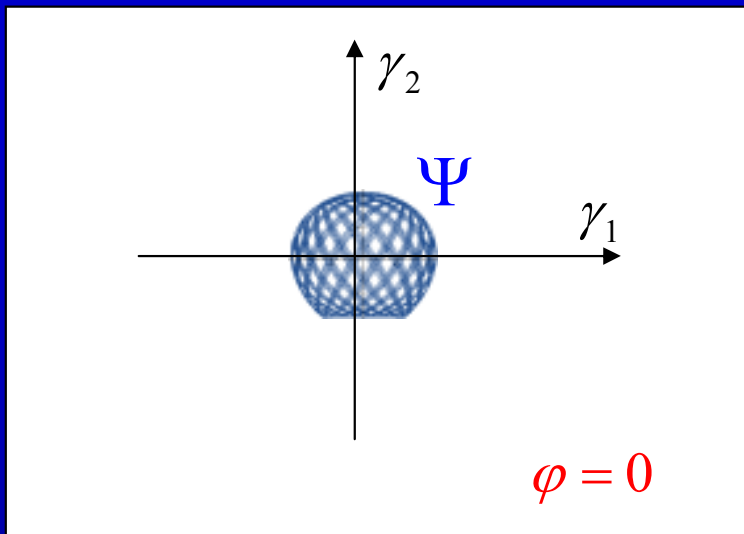


Rotation in the (γ_1, γ_2) plane



If the observer, together with the reference frame, starts to rotate, then after having exhibited the $\varphi = 2\pi$ turn, he observes the same spinor Ψ , as he did at $\varphi = 0$.

The sign of the spinor did not change.

This was a passive transformation. In the new reference frame the object was observed to be transformed according to $\Psi' = \mathbf{R} \Psi \mathbf{R}^{-1}$.

There must also exist the corresponding active transformation, such that in a fixed reference frame the spinor Ψ transform as $\Psi' = \mathbf{R} \Psi \mathbf{R}^{-1}$.