

Corollary: localized at $p > 2$,

$$\Omega^{2n} S^{2n+1} \xrightarrow{S^1} \Omega^{2n} S^{2n+1}$$

$\underbrace{\hspace{10em}}_{p^n}$

$$\therefore p^n \pi_{* > 2n+1} S^{2n+1}(p) = 0$$

Taking universal covers: loc at p or completed at $p > 2$

$$\star \simeq p^n : (\Omega^{2n} S^{2n+1}) \langle 1 \rangle = \Omega^{2n} (S^{2n+1} \langle 2n+1 \rangle)$$

But: loc or completed at any prime p :
 $\exists k$ such that

$$\star \simeq p^k : \Omega^{2n-2} (S^{2n+1} \langle 2n+1 \rangle) = \Omega^{2n-2} (S^{2n+1} \langle 3 \rangle)$$

Proof: $L[(\Omega^{2n-2} S^{2n+1}) \langle 3 \rangle] =$
 $(\Omega^{2n-2} S^{2n+1}) \hat{p} \xrightarrow{\pi_3} \hat{Z}_p$

Note: in localization theorem, finite complex may be replaced by loops on finite complex since: $X \text{ local} \Rightarrow \Omega X \text{ local}$