Final polarization after a rotation of $\frac{\pi}{2}$ from initially $+y$ polarized UCNs

The last k value that gives this percentage

- - - $P_y = 95.0\%$, k=6.145
- - - $P_y = 98.0\%$, k=9.952
- - - $P_y = 99.0\%$, k=14.07
- - - $P_y = 99.8\%$, k=29.53