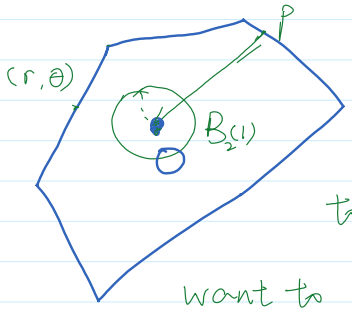
July 12

Monday, July 12, 2021 1:50 PM

WLoG . Convex set called K



$f: \partial K \to S^1$; f homeomorphism.

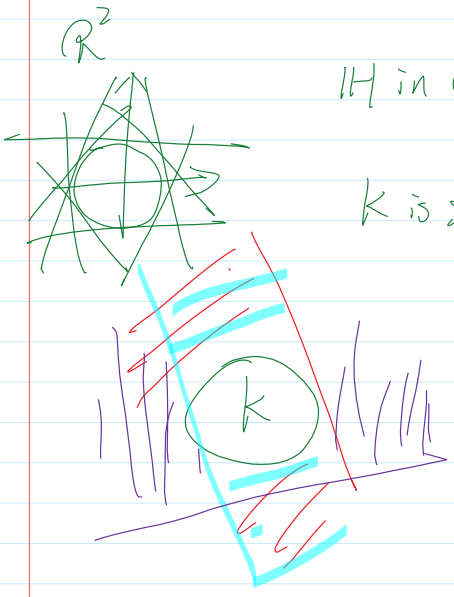
$p \to \frac{p}{\|p\|}$,

$\|p\| \neq 0$ due to openedness of K

want to extend f inside K.

$f^{-1}: S^1 \to \partial K$

$g(x): D^2 \to K$, $x \mapsto \|x\| f^{-1}\left(\frac{x}{\|x\|}\right)$



H in $\mathbb{R}^2$ is $H_{(a,b)} = \{ax+by \geq 0\}$.

K is set, K is convex if $K = \bigcap \{H \mid H(a,b) \geq K\}$.