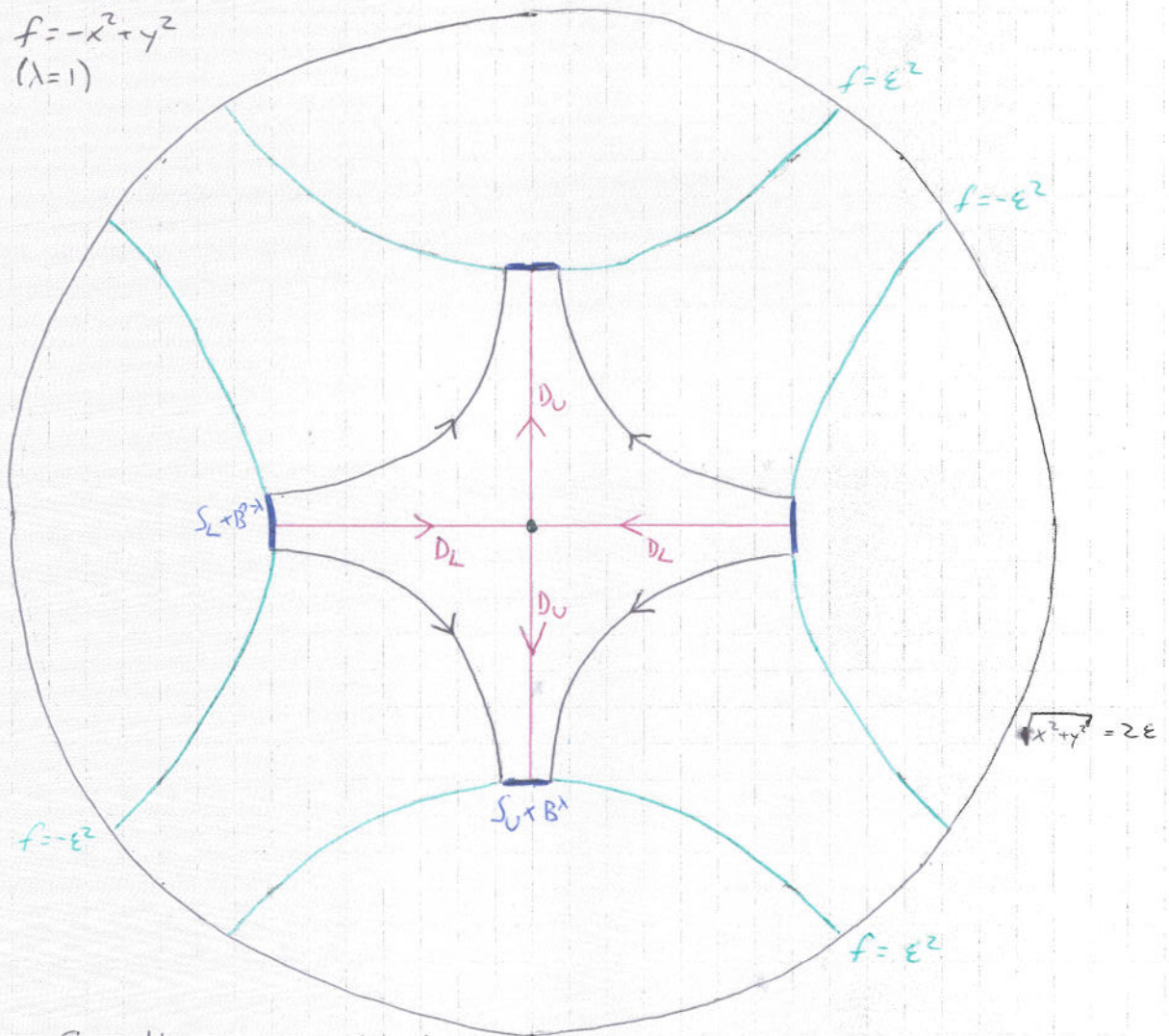


$$f = -x^2 + y^2$$

$$(\lambda = 1)$$



Saddle region H bounded by
 flow lines passing within $\sqrt{x^2 + y^2} < \frac{1}{2} \epsilon$ (black)
 and tubular neighbourhoods of $S_L \subset f^{-1}(-\epsilon^2)$
 and $S_U \subset f^{-1}(\epsilon^2)$ (blue)

