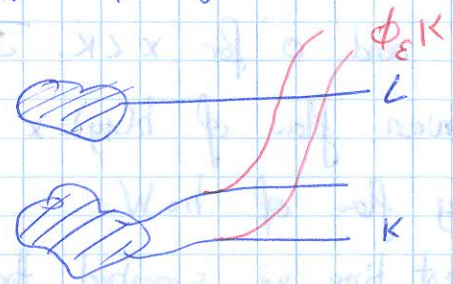


Solution: there is a distinguished choice of direction near  $\infty$ : "counterclockwise"  $\partial_0$  near  $\infty$ , or wrt  $\omega_{std}$  (a positive multiple) of the flow near  $\infty$  of  $h=r$ .

Define  $\text{Hom}(K, L) := \text{HF}^*(\phi_\epsilon \tilde{K}, L)$   
 ↳ compactly supported perturbation  
 time- $\epsilon$  counterclockwise bent (lift  $\uparrow^E$  of  $\epsilon$  times this here  $h=r$  in  $\mathbb{C}$ ).

$\epsilon$  sufficiently large so that all ends of  $K$  "above" those of  $L$ :



And we have a PSS isomorphism  $\text{Hom}(L, L) \cong H^*(L)$  (when  $L$  has one end at least).

18/05/16

Last time:  $(E^{2n+2}, \omega)$  symplectic LG model,

- \*  $E$  non-compact symplectic (exact or monotone, ...)
- \*  $W: E \rightarrow \mathbb{C}$  symplectic fibration away from  $K_{\text{cpt}} \subseteq \mathbb{C}$ , with symplectic // transport maps (away from  $K_{\text{cpt}}$ ).

$M := W^{-1}(p)$  general fiber:  $\text{codim} = 2$  sympl. submanifold.

Towards  $F(E, W)$ :

Objects: properly embedded  $L \subseteq E$  (with brane structures) st  $W(L)$  contained in



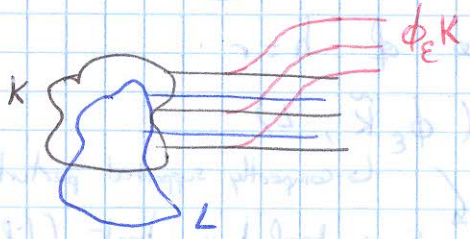
Given  $L$ , get  $\mathcal{D}_L \subseteq (-\pi, \pi)$  the angles, or  $\mathcal{D}_L \subseteq \mathbb{R}$  the asymptotic heights.

We say  $\mathcal{D}_K > \mathcal{D}_L$  if  $\theta_K > \theta_L \forall \theta_K \in \mathcal{D}_K, \forall \theta_L \in \mathcal{D}_L$ .

Last time, we argued what morphisms should look like in  $H^0 F(E, W)$ .

$$H^0 \text{hom}_F(K, L) := \text{Hom}(K, L) = \text{HF}^0(\phi_\epsilon K, L)$$

where  $\phi_\epsilon$  is the time  $\epsilon$  "admissible positive flow", "counterclockwise bent" (in the angular setup) which is large enough so that  $\phi_\epsilon K > L$ .



What is an admissible flow? In the straight-lines setup, consider



the vector field on  $\mathbb{C}$  which equals  $\partial_y$  for  $x \gg 0$ , and 0 for  $x < K$ . It is the Hamiltonian flow of  $h(x,y) = x$  (when  $x \gg 0$ ).

An admissible flow is any flow of  $h \circ W$ .

In the angular setup, last time we suggested that one can use flows of the form  $h \circ W$  where  $h = r$ ,  $X_h$  is  $\partial_\theta$  on  $\mathbb{C} \setminus \mathbb{D}^2$ . Note that this flow is not admissible for a given flow for all times (if the lines can hit an angle  $\pi$  after being flown). We may not be able to find a flow  $\phi_t K$  such that  $\phi_t K$  is admissible  $\forall t \in \mathbb{R}$  with  $\phi_t K > L$ .



Solution: allow flows which on  $\mathbb{C} \setminus K_{\text{ext}}$  have the form  $h_{r,\theta} = \chi(\theta) h(r)$ , where  $\chi$  is a cutoff function equal to 0 at  $-\pi$ .

[ Lemma: Flowing by any time side an  $h_{r,\theta}$  flow preserves admissibility.

Proof: check  $h_{r,\theta}$  is radial: near  $\infty$ , sends rays to rays.  $\square$

For today, switch for horizontal ray framework for  $F(E, W)$ .

