To show the integrals bit,

have

$$\lambda(C_v^i) = \{t \in B(h) : \dots\}$$

$$=$$

$$\lambda(C_{u,v}) = \int_{B(h)} \mathbb{1}[\, X(s/\sqrt{u}) > v \,]\, ds.$$

substitute $t = s/\sqrt{u}$.

$$\Rightarrow \lambda(C_{u,v}) = u^{D/2} \cdot \int_{B(h)/\sqrt{u}}$$

could also just restrict t to $B(h)/\sqrt{v}$. and be done.

Need **to** think about the difference between scaling by u and **scaling by** v.