

Thus

$\mathbb{H}_L = \mathbb{H}$  for all  $L \Rightarrow \mu(B_L) = \mathbb{H} + k_L$   
 $\Rightarrow$  All curves  $B_L$  are translates of one another.  $\square$

This is not hard: since  $K(0) = 0$ , by the result of Section 6 of Chapter 2,  $K$  is a group homomorphism.

$\square$  We may assume  $L_0 = 0$  by translation.

$K: A \rightarrow A$  is holomorphic  $\Rightarrow$  By the proposition on P326,  $K$  is  $t \circ g$ , where  $t$  is a translation and  $g$  is a group homomorphism.  $\Rightarrow$  Since  $K(0) = 0$ ,  $t$  is the identity.  $\Rightarrow K = g$  is a group homomorphism.  $\square$

We have

$$i'(L) \in B_L = B_{L_0} + K(L)$$

for each  $L$ , and hence

$$K(L) + L \in -B_{L_0} = B_{L_0}$$

for each  $L$ .

$\square$   $i': A \rightarrow A$  corresponds to the involution  $z \mapsto -z$  on  $\mathbb{C}^2/\Lambda$ . (See P180).

Since  $B_{L_0}$  is a theta divisor and  $B_{L_0} \ni 0$ , if  $z \in B_{L_0}$ , then  $-z \in B_{L_0}$  by P320.

$\Rightarrow B_{L_0} = -B_{L_0}$  and  $K(L) - i'(L) = K(L) + L \in -B_{L_0}$