

**Affine Lie algebras and applications**  
**Ten-minutes problem 10**

Compute the action of the affine Weyl group element  $s_0 \in W = W^0 \ltimes Q^\vee$  on the finite Cartan subalgebra  $\mathfrak{h}^0$  ( $W$  acts as usual and the coroot lattice via translations).