



Figure 1: Speed profile  $v(x')$  (blue) for a RT particle in 1d subjected to a square-wave pattern with minimum and maximum velocity  $v_1$  and  $v_2$ . The plot as been extended from  $-\lambda$  to  $\lambda$  for clarity. The *velocity* profile is  $v(x) - c$  for a right-oriented particle (orange). For  $v_1 < c < v_2$ ,  $v(x)$  crosses zero (gray area) at at  $x' = \lambda/2$  and at  $x' = 0$ . The velocity field direction is represented by the black arrows. We note that the arrows point towards  $x' = 0$  both from the left and from the right causing an accumulation of particles in this point.