



Figure 1: Illustration of the preconditioning in algo:preconditioning. The point  $x_0$  is an approximation of  $x(t_0)$ . The blue line represents the predictor step, and the blue dotted line represents the corrector step to get an approximation  $x_1$  of  $x(t_1)$ . The line segment  $s(t)$  connecting  $x_0$  and  $x_1$  is presented by the red line. The tilted interval box is centered at  $s(t)$  at each  $t \in [t_0, t_1]$  with the same radius.