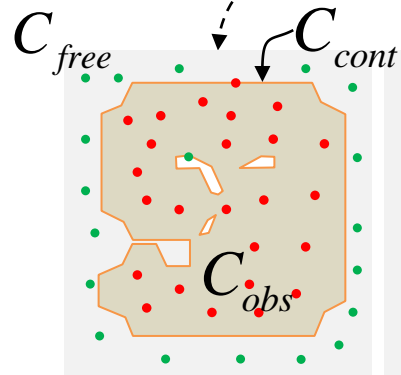
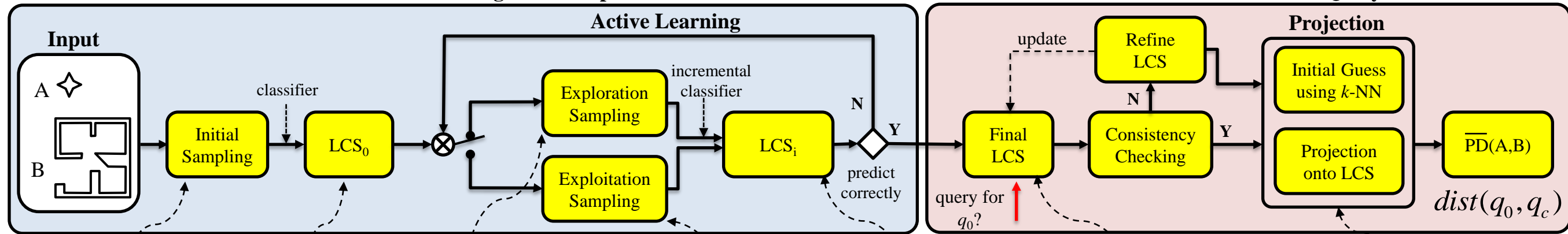


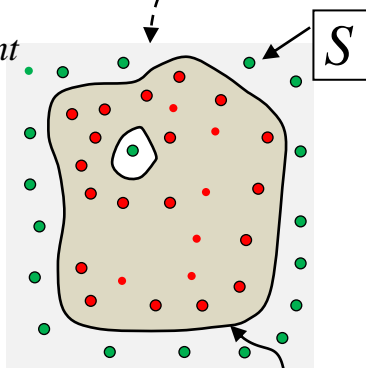
Offline Learning Contact Space

Runtime PD Query



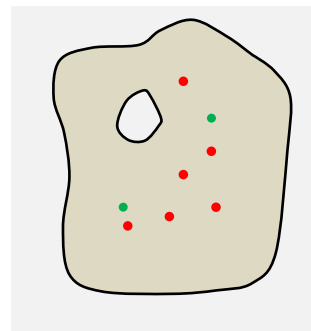
exact contact space (orange)

(a)



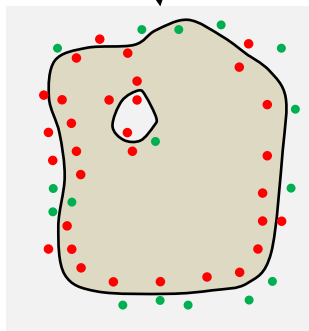
LCS_0

(b)



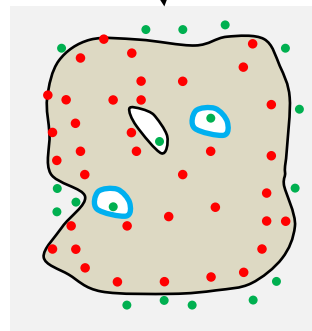
exploration

(c)



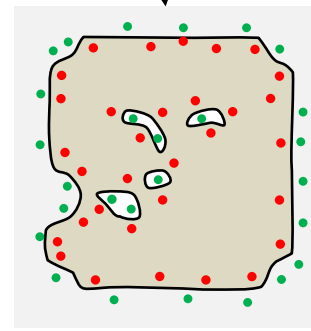
exploitation

(d)



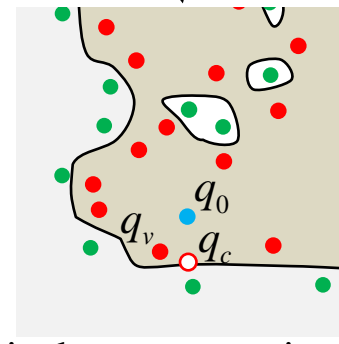
LCS_i
after i th iteration
of active learning

(e)



final LCS after
active learning

(f)



q_v is the nearest point to q_0
and q_c is the projection of
 q_0 onto LCS

(g)