

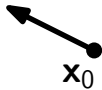
\mathcal{L}_0

1) From an initial starting point \mathbf{x}_0 ,
choose a random direction

\mathbf{x}_0

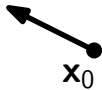
\mathcal{L}_0

1) From an initial starting point \mathbf{x}_0 ,
choose a random direction



\mathcal{L}_0

2) Place random initial bound
of width w



\mathcal{L}_0

2) Place random initial bound
of width w



The diagram shows an irregular, blob-like shape representing a region \mathcal{L}_0 . Inside this region, there is a point labeled \mathbf{x}_0 . A line segment passes through \mathbf{x}_0 , with short perpendicular tick marks at each end, indicating a width w .

\mathbf{x}_0

\mathcal{L}_0

3) Extend bounds by
"stepping out" procedure



A diagram illustrating the "stepping out" procedure. It shows a black dot labeled \mathbf{x}_0 inside a light gray irregular region. A line segment extends from \mathbf{x}_0 towards the boundary of the region. At each end of this segment, there is a small tick mark perpendicular to the segment, indicating the current and next bounds.

\mathbf{x}_0

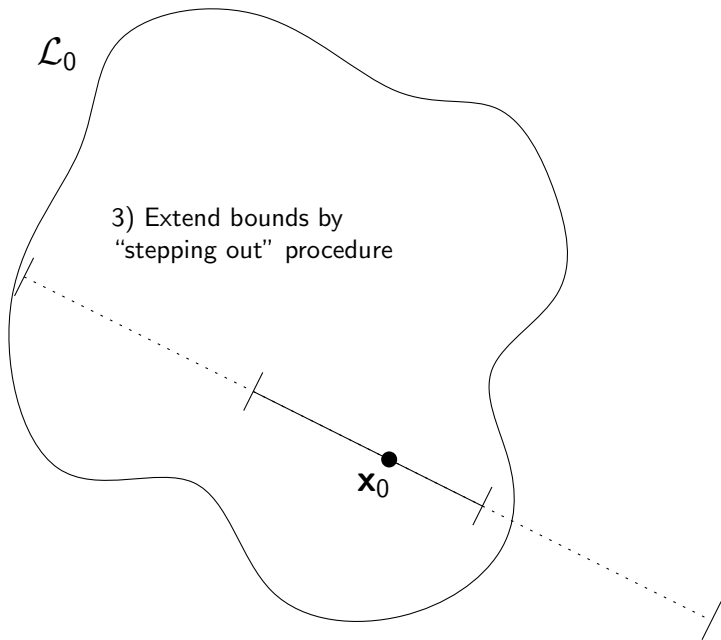
\mathcal{L}_0

3) Extend bounds by
"stepping out" procedure

\mathbf{x}_0



The diagram shows an irregular, light-gray shaded region representing a domain. A point \mathbf{x}_0 is marked with a black dot inside the region. A solid line segment extends from \mathbf{x}_0 towards the right boundary of the region, ending at a tick mark on the boundary. Another solid line segment extends from \mathbf{x}_0 towards the upper-left boundary, also ending at a tick mark. A dotted line segment extends from the rightmost tick mark further to the right, ending at a third tick mark outside the original region, illustrating the 'stepping out' procedure.



\mathcal{L}_0

3) Extend bounds by
"stepping out" procedure

\mathbf{x}_0



The diagram shows an irregular, light-gray shaded region representing a set \mathcal{L}_0 . A point \mathbf{x}_0 is located inside this region. A solid line segment passes through \mathbf{x}_0 , with tick marks at both ends indicating the current bounds. This segment is extended into a dashed line that passes through the boundary of the region. The text '3) Extend bounds by "stepping out" procedure' is centered within the region, and the label \mathcal{L}_0 is placed near the top-left boundary.

\mathcal{L}_0

3) Extend bounds by
"stepping out" procedure

\mathbf{x}_0



The diagram shows an irregular, blob-like region labeled \mathcal{L}_0 . A straight line passes through the region from the upper-left to the lower-right. A point labeled \mathbf{x}_0 is marked on this line, located within the region. The text "3) Extend bounds by 'stepping out' procedure" is centered within the region.

\mathcal{L}_0

4) Sample uniformly along this chord

\mathbf{x}_0



The diagram shows a light blue shaded region labeled \mathcal{L}_0 . A black line segment, representing a chord, passes through the region from the upper left to the lower right. The endpoints of this chord are marked with short perpendicular tick marks. A black dot on the chord is labeled \mathbf{x}_0 . The text '4) Sample uniformly along this chord' is positioned in the upper central part of the region.

\mathcal{L}_0

4) Sample uniformly along this chord

\mathbf{x}_1

\mathbf{x}_0

