



Dirichlet-
Boundary-
Condition,
 $T_b \rightarrow$
results in
 $nflux_{ht}$

A blue arrow points from the text on the left towards the 1D geometry, and another blue arrow points from the 1D geometry towards the boundary condition text on the right.

the tube with a
cross section area
of
 $A_t = \pi/4 * D^2$ and a
perimeter of
 $U = \pi * D$ is
simplified as a line
in a 1D geometry

$nflux_{ht}/A_t$
is set up as
an inner
source and
sink

Red curved lines connect this text to the 1D geometry and the integration text below.

therefore
 $nflux_{ht}$ has to
be integrated
over U for the
length z_t

Red curved lines connect this text to the 1D geometry and the boundary condition text above.