



A diagram illustrating a fluid flow domain. The domain is bounded by a top boundary and a bottom boundary. The top boundary is a smooth curve sloping downwards from left to right, labeled  $z = h(x)$ . The bottom boundary is a wavy line, labeled  $z = b(x)$ . Inside the domain, there are six arrows representing the velocity field, arranged in two rows of three. The arrows in the top row point generally to the right but are slightly angled downwards. The arrows in the bottom row point generally to the right and are more horizontal. The text "velocity (u,w)" is centered in the domain.

$$z = h(x)$$

velocity (u,w)

$$z = b(x)$$