



The diagram shows a light gray, horizontally-oriented oval representing a domain  $\Omega$ . The boundary of the oval is divided into three segments: a blue segment on the left, a red segment at the bottom, and an orange segment on the right. Each segment is labeled with a corresponding boundary condition equation.

$$\Gamma_f = \{\tilde{q}_n, M_{nn} \text{ known}\}$$

$$\Gamma_c = \{w_t, \partial_n w_t \text{ known}\}$$

$$\Omega$$

$$\Gamma_s = \{w_t, M_{nn} \text{ known}\}$$