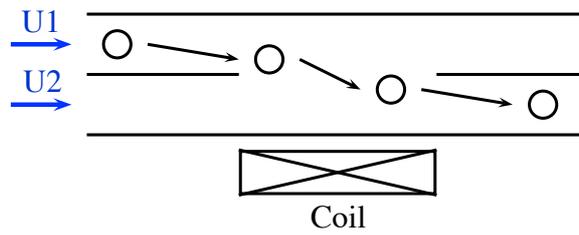# 5   Modelization principle



U1 : Velocity of the fluid in channel 1

U2 : Velocity of the fluid in channel 2

The coil creates a magnetic field which attracts the cell, marked with magnetic beads.

The first step is to implement a model of the cell without any magnetic field, just to have values of the drag and lift forces.