Highligths:

1. We model Bretherton/Taylor flow in microchannels with rectangular cross sections
2. Bubble can have axisymmetric and non-symmetric shape depending on the capillary number
3. We simulate with the lattice Boltzmann method (LBM) free-energy binary liquid model
4. Results show that we capture all phenomena indicated in literature
5. Lattice Boltzmann method is a reliable tool to resolve dynamics of Taylor bubbles