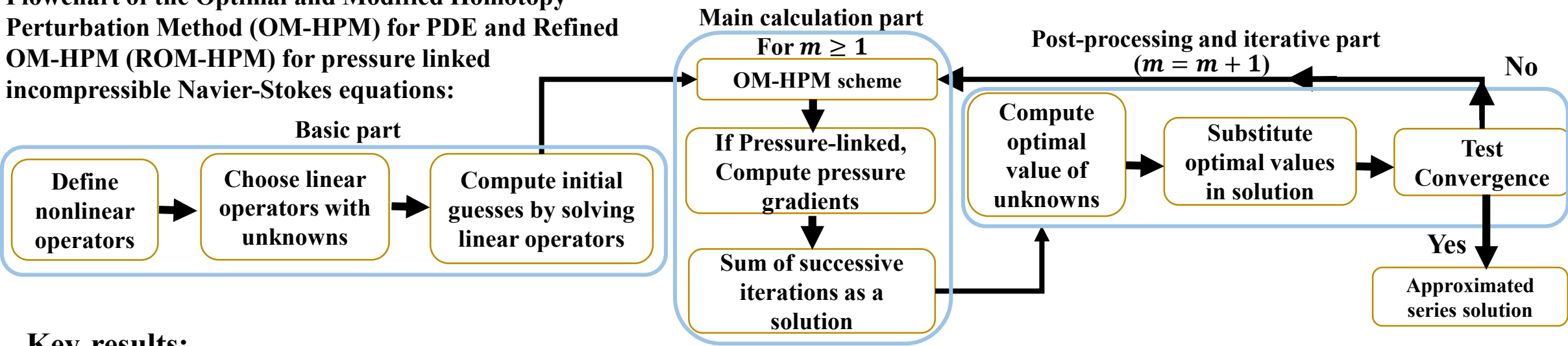
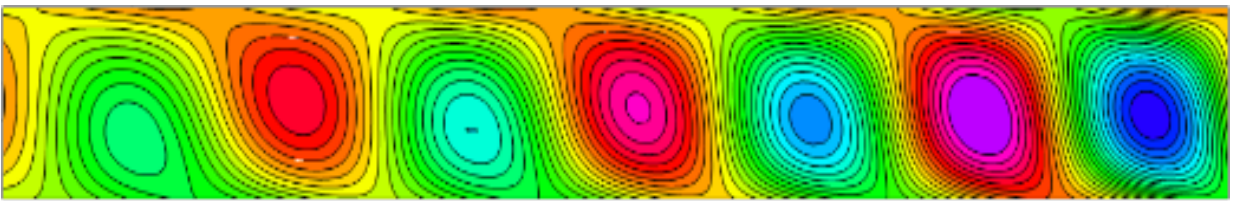


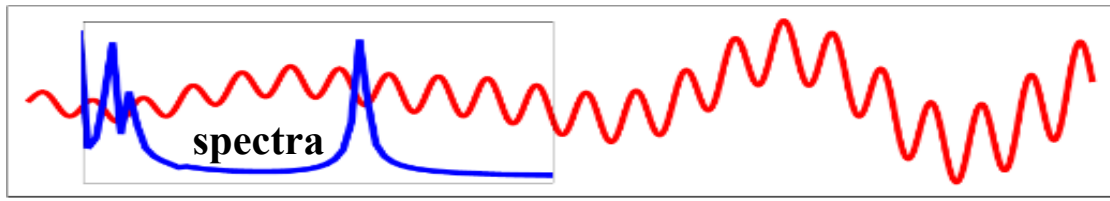
Flowchart of the Optimal and Modified Homotopy Perturbation Method (OM-HPM) for PDE and Refined OM-HPM (ROM-HPM) for pressure linked incompressible Navier-Stokes equations:



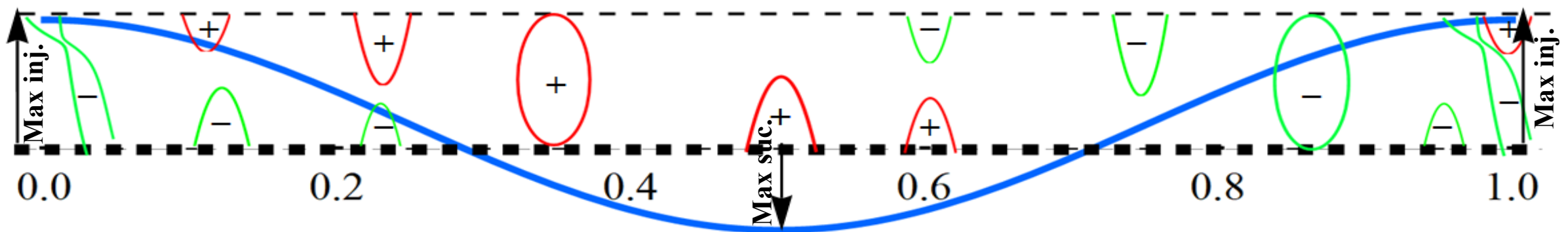
Key-results:



Vortex at $t=0.35$



Time evolution(unsteadiness)



Formation of different vortices inside micro-channel during a period $t \in [0, 1]$ in the region $x \in (20, 21)$.