

Project title	Where to start from	Bibliography	Assigned to
Duality based estimators	Step-14	Bangerth-Rannacher book	
NS preconditioner optimisation via ANN	Step-35		
Adaptive time-stepping for Navier-Stokes	Step-35		
Immerse Boundary Methods (IBM)	Step-70 + Step-60 + Marco Feder's code		
Bulk-surface multiphysics coupling (CutFEM?)	Step-38 + Step-85 + Marco Feder's code	https://doi.org/10.1016/j.camwa.2023.09.017	
Step-26 adaptive time-stepping	Step-26	Verfurth 2005 / book	
Extension of cardiac Electrophysiology monodomain solver with adaptive schemes	https://github.com/pcafrica/electrophysiology_solver		
Zienkiewicz-Zhu estimator on triangular grids	Step-6 simplex version	https://github.com/dealii/dealii/tree/master/ests/simplex	
A posteriori error analysis and adaptivity for mixed problems	Step-20		
DG time-stepping (NS?)	Step-67 extension to NS		
Wave equation. Variable coefficients, comparisons	Step-23,24		
Basic VEM on quadrilateral meshes	Step-3	https://www.worldscientific.com/doi/10.1142/S021820251440003X?srsId=AfmBOopiZhklXAULn3MzJdVc4FsswDV1zfA6PK33SiyIORsJmMILHdC2	
Accelerating linear solver convergence with PINNs			
Bifurcation problems			
Electrolyte simulation			