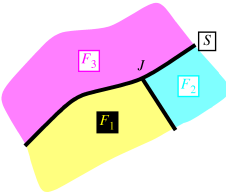
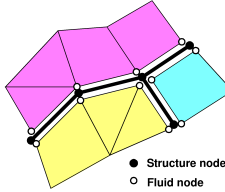
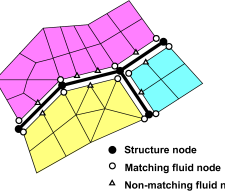
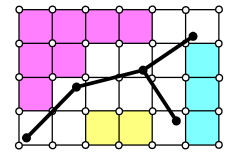


A possible classification

FSI Algorithm	FSI Detection	Basic	No structural failure , moderate rotations
		Embedded	Structure can fail, arbitrary rotations
	FSI Enforcement	Strong	Constraints on F and S velocities are imposed, e.g. by Lagrange multipliers (implicit)
		Weak	Pressure forces are transmitted from the fluid to the structure and structure motion provides weak feedback on fluid (S=master / F=slave)

A Classification of FSI Algorithms

Available FSI Algorithms

FSI Algorithm	Detection Strategy	Spatial Discretization	Enforcement Strategy	Name / command	Use with
	Basic (no structural failure)	Conforming F-S meshes 	Strong	FSA	FE, NCFV
			Weak	Merge F-S nodes	CCFV
		Non-conforming F-S meshes 	Strong	FSA	FE, NCFV
			Weak	Declare non-matching F-nodes	CCFV
	Embedded (structure can fail)	S-mesh is Immersed in the F-mesh 	Strong	FLSR	FE, NCFV
			Weak	FLSW	CCFV

A Summary of FSI Algorithms