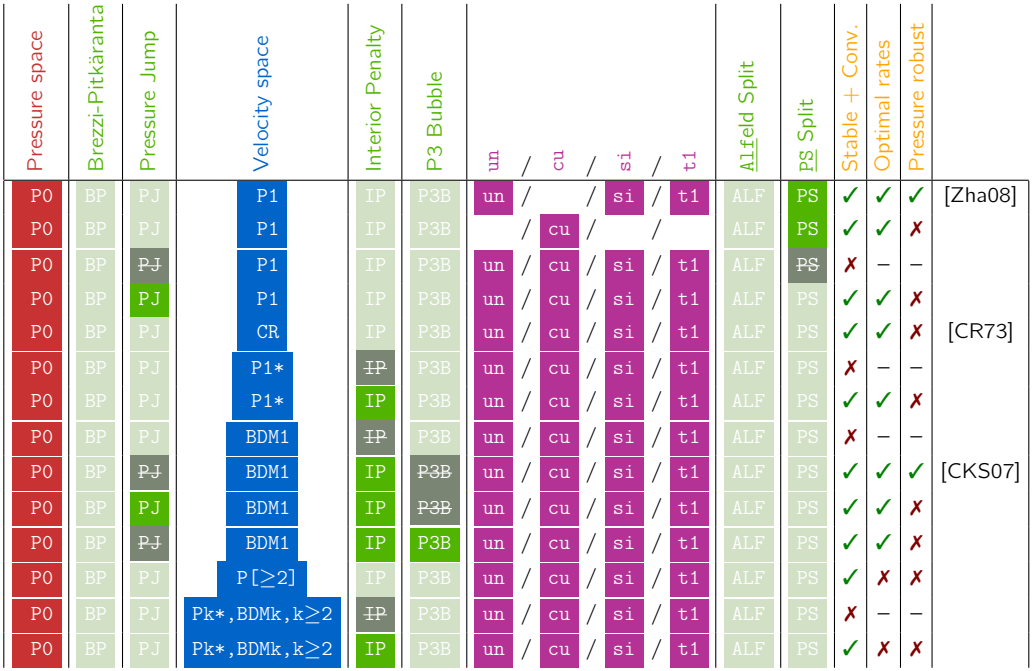
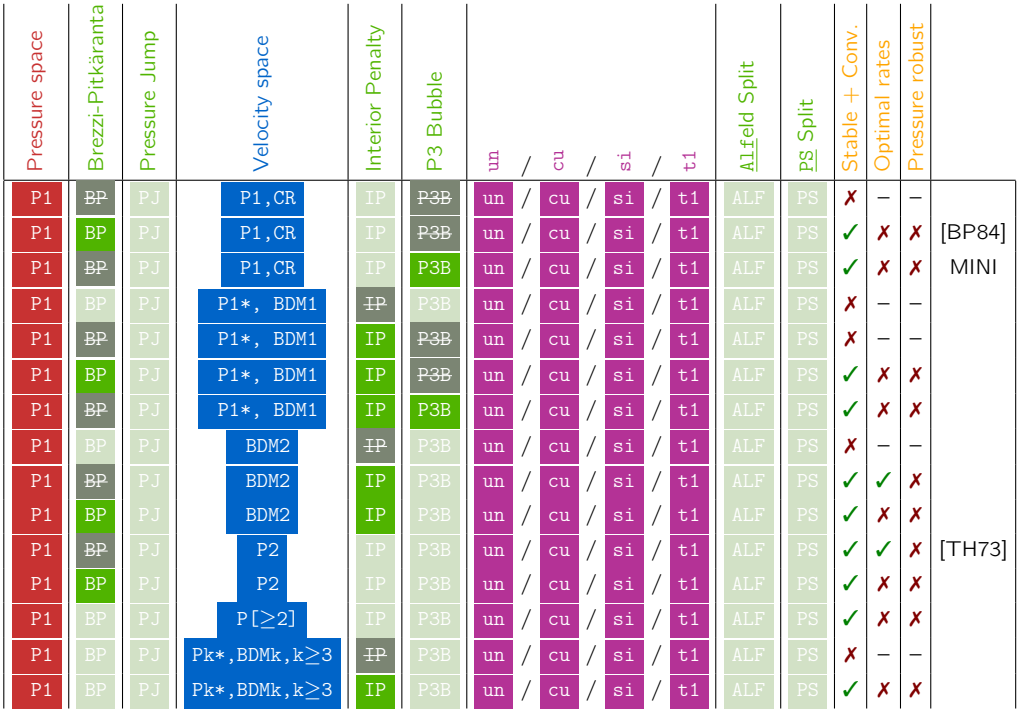

Pressure space
Brezzi-Pitkäranta
Pressure Jump
Velocity space
Interior Penalty
P3 Bubble
un / cu / si / t1
Alfeld Split
PS Split
Stable + Conv.
Optimal rates
Pressure robust
P0 BP PJ P1 IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✓ [Zha08]
P0 BP PJ P1 IP P3B cu ALF PS ✓ ✓ ✗
P0 BP PJ P1 IP P3B un / cu / si / t1 ALF PS ✗ – –
P0 BP PJ P1 IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✗
P0 BP PJ CR IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✗ [CR73]
P0 BP PJ P1* IP P3B un / cu / si / t1 ALF PS ✗ – –
P0 BP PJ P1* IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✗
P0 BP PJ BDM1 IP P3B un / cu / si / t1 ALF PS ✗ – –
P0 BP PJ BDM1 IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✓ [CKS07]
P0 BP PJ BDM1 IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✗
P0 BP PJ BDM1 IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✗
P0 BP PJ P[≥2] IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗
P0 BP PJ Pk*,BDMk,k≥2 IP P3B un / cu / si / t1 ALF PS ✗ – –
P0 BP PJ Pk*,BDMk,k≥2 IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗


Pressure space
Brezzi-Pitkäranta
Pressure Jump
Velocity space
Interior Penalty
P3 Bubble
un / cu / si / t1
Alfeld Split
PS Split
Stable + Conv.
Optimal rates
Pressure robust
P1 BP PJ P1,CR IP P3B un / cu / si / t1 ALF PS ✗ – –
P1 BP PJ P1,CR IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗ [BP84]
P1 BP PJ P1,CR IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗ MINI
P1 BP PJ P1*, BDM1 IP P3B un / cu / si / t1 ALF PS ✗ – –
P1 BP PJ P1*, BDM1 IP P3B un / cu / si / t1 ALF PS ✗ – –
P1 BP PJ P1*, BDM1 IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗
P1 BP PJ P1*, BDM1 IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗
P1 BP PJ BDM2 IP P3B un / cu / si / t1 ALF PS ✗ – –
P1 BP PJ BDM2 IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✗
P1 BP PJ BDM2 IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗
P1 BP PJ P2 IP P3B un / cu / si / t1 ALF PS ✓ ✓ ✗ [TH73]
P1 BP PJ P2 IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗
P1 BP PJ P[≥2] IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗
P1 BP PJ Pk*,BDMk,k≥3 IP P3B un / cu / si / t1 ALF PS ✗ – –
P1 BP PJ Pk*,BDMk,k≥3 IP P3B un / cu / si / t1 ALF PS ✓ ✗ ✗

Pressure space	Brezzi-Pitkäranta	Pressure Jump	Velocity space	Interior Penalty	P3 Bubble	un / cu / si / t1	Alfeld Split	PS Split	Stable + Conv.	Optimal rates	Pressure robust	
P1*	~~BP~~	~~PJ~~	P1,CR,BDM1,P1*	IP	P3B	un / cu / si / t1	ALF	PS	✗	–	–	
P1*	BP	PJ	P1	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	
P1*	BP	~~PJ~~	P1	IP	P3B	un / cu / si / t1	ALF	~~PS~~	✗	–	–	
P1*	BP	PJ	P1,CR	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	
P1*	~~BP~~	PJ	P1,CR	IP	~~P3B~~	un / cu / si / t1	ALF	PS	✗	–	–	
P1*	~~BP~~	PJ	P1,CR	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	
P1*	BP	PJ	CR	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	
P1*	BP	PJ	BDMk,Pk*,k≥1	~~IP~~	P3B	un / cu / si / t1	ALF	PS	✗	–	–	
P1*	BP	PJ	BDM1,P1*	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	
P1*	BP	~~PJ~~	BDM1,P1*	IP	P3B	un / cu / si / t1	ALF	~~PS~~	✗	–	–	
P1*	BP	PJ	BDM1,P1*	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	
P1*	~~BP~~	PJ	BDM1,P1*	IP	~~P3B~~	un / cu / si / t1	ALF	PS	✗	–	–	
P1*	~~BP~~	PJ	BDM1,P1*	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	
P1*	~~BP~~	~~PJ~~	P2	IP	~~P3B~~	un / / si / t1	ALF	PS	✓	✓	✓	
P1*	~~BP~~	~~PJ~~	P2	IP	~~P3B~~	un / / si / t1	ALF	PS	✓	✓	✓	
P1*	~~BP~~	~~PJ~~	P2	IP	~~P3B~~	/ cu / /	ALF	PS	✓	✓	✗	
P1*	~~BP~~	~~PJ~~	P2	IP	~~P3B~~	/ cu / /	ALF	PS	✓	✓	✗	
P1*	~~BP~~	~~PJ~~	P2	IP	~~P3B~~	/ / / t1	~~ALF~~	~~PS~~	✓	✗	?	
P1*	~~BP~~	~~PJ~~	P2	IP	~~P3B~~	un / cu / si /	~~ALF~~	~~PS~~	✗	–	–	
P1*	~~BP~~	PJ	P2	IP	P3B	un / cu / si / t1	~~ALF~~	~~PS~~	✓	✓	✗	
P1*	BP	PJ	P2	IP	P3B	un / cu / si / t1	~~ALF~~	~~PS~~	✓	✗	✗	
P1*	~~BP~~	PJ	P2	IP	P3B	un / cu / si / t1	~~ALF~~	~~PS~~	✓	✓	✗	
P1*	~~BP~~	~~PJ~~	BDM2	IP	~~P3B~~	un / cu / si / t1	ALF	PS	✓	✓	✓	[CKS07]
P1*	~~BP~~	PJ	BDM2,P2*	IP	P3B	un / cu / si / t1	ALF	PS	✓	✓	✗	
P1*	BP	PJ	BDMk,Pk*,k≥2	IP	P3B	un / cu / si / t1	ALF	PS	✓	✗	✗	

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