

		dimension 2																									5<=m<10, H>=10
		# separate Pareto set subsets					# separate Pareto front subsets					convex Pareto front					Pareto set outside [-5,5]^n					#basins of attractions					
function		inst1	inst2	inst3	inst4	inst5	inst1	inst2	inst3	inst4	inst5	inst1	inst2	inst3	inst4	inst5	inst1	inst2	inst3	inst4	inst5	inst1	inst2	inst3	inst4	inst5	
F 1	=(f 1 , f 1)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	
F 2	=(f 1 , f 2)	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	0	1	1	1	1	1	
F 3	=(f 1 , f 6)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1		
F 4	=(f 1 , f 8)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1		
F 5	=(f 1 , f 13)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1		
F 6	=(f 1 , f 14)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1		
F 7	=(f 1 , f 15)	4	H	m	H	H	3	H	m	H	H	0	0	0	0	0	0	0	0	0	H	H	H	H	H		
F 8	=(f 1 , f 17)	m	m	m	m	m	m	m	m	m	m	0	0	0	0	0	0	0	0	0	H	H	H	H	H		
F 9	=(f 1 , f 20)	1	m	m		1	1	m	m		1	1	1	1	1	1	0	0	0	0	0	m	m	m	m		
F 10	=(f 1 , f 21)	3	2	2	m		1	2	1	1	3	1	0	0	0	0	0	0	0	0	H	H	H	H	H		
F 11	=(f 2 , f 2)	?	?	?	?	?	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	PS likely continuous, but approximation doesn't show it	
F 12	=(f 2 , f 6)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	1	1	1	1	1	1		
F 13	=(f 2 , f 8)	1	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	?	?	?	?	?		#basins unclear inst. 1 almost convex, inst.2&3 look convex inst. 5 looks convex
F 14	=(f 2 , f 13)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	0	1	1	1	1	1		
F 15	=(f 2 , f 14)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	1	0	1	1	1	1		
F 16	=(f 2 , f 15)	H	H	m	H	H	H	H	m	m	H	0	0	0	0	0	1	1	0	0	1	H	H	H	H	inst 3 looks like 1 front	
F 17	=(f 2 , f 17)	H	H	H	H	H?	H	H	H	H	H	0	0	0	0	0	0	0	0	0	H	H	H	H	H		
F 18	=(f 2 , f 20)	3	3	3	3	3	3	3	1?		3	0	0	0	0	0	1	1	0	0	0	H	H	H	H		
F 19	=(f 2 , f 21)	3	3	2	3	2	2	2	2	1	2	0	0	0	0	0	0	0	0	0	0	H	H	H	H		
F 20	=(f 6 , f 6)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	1	1	1	X		1
F 21	=(f 6 , f 8)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	2	1	3/5?	1		
F 22	=(f 6 , f 13)	1	1	1	1	1	1	1	1	1	1	0	1?		0	0	0	0	0	0	1	1	1	1	1		
F 23	=(f 6 , f 14)	1	1	1	1	1	1	1	1	1	1	0?	0?		0	0	0	1	1	0	1	1/2?	1	1	1		
F 24	=(f 6 , f 15)	H	H	m	H	m	m	3	4	H	m	0	0	0	0	0	0	0	0	1	0	H	H	H	H		
F 25	=(f 6 , f 17)	H	H	H	H	H	H	H	m	H	H	0	0	0	0	0	0	0	0	0	H	H	H	H	H		
F 26	=(f 6 , f 20)	m	4	6	3	4	3	4	2	2	2	0	0	0	0	0	0	0	0	0	H	H	H	H	H	convexity of front unclear + #basins not clear	
F 27	=(f 6 , f 21)	2	4	3	3	m	2	2	2	2	2	0	0	0	0	0	0	0	0	0	H	H	H	H	H		
F 28	=(f 8 , f 7)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	2	2	2	2		2
F 29	=(f 8 , f 13)	1	1	2	2	1	1	1	1	1	1	1	1	1?		1	0	0	1	0	0	1	1	1	2?		1
F 30	=(f 8 , f 14)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1/2?	2	2/3?	3/1?		2/m?
F 31	=(f 8 , f 15)	H	m	m	H	H	m	3	4	H	m	0	0	0	0	0	0	0	0	1	0	H	H	H	H	H	
F 32	=(f 8 , f 17)	H?	m?	H	H	H	m	m?	H	H	H	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H	
F 33	=(f 8 , f 20)	3	4	m	2?	4	2	3	m		3	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H	
F 34	=(f 8 , f 21)	3	3	m	m	m	3	1	1	3	2	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H	
F 35	=(f 13 , f 13)	1	1	1	1	1	1	1	1	1	1	1?	1	1?	1?	1	0	0	0	0	0	1	1	1	1	1	
F 36	=(f 13 , f 14)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	1	1	X	1	1	local dominance plot missing for inst. 3
F 37	=(f 13 , f 15)	H	H	H	H	m	H	H	H	H	4	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H	
F 38	=(f 13 , f 17)	H	H	H	H	H	H	H	H	H	H	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H	
F 39	=(f 13 , f 20)	3	3?	3	2	5	3	2	2	2	3	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H	

F 40	=(f 13 , f 21)	4 2 2 2 4	3 2 2 2 2	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 41	=(f 14 , f 14)	1 1 1 1 1	1 1 1 1 1	1 1? 1? 1 1	0 0 0 0 0	1 1 1 1 1	
F 42	=(f 14 , f 15)	H 5 H H H	H 5 H H H	0 0 0 0 0	1 0 0 0 0	H H H H H	
F 43	=(f 14 , f 17)	H H H H H	H H H H H	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 44	=(f 14 , f 20)	m 4 4 3 3	m 4 4 3 3	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 45	=(f 14 , f 21)	5 4 4 5 4	3 3 1 3 2	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 46	=(f 15 , f 15)	m m H H H	3 m m m m	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 47	=(f 15 , f 17)	H H H H H	H H H H H	0 0 0 0 0	1 0 0 0 1	H X H H H	local dominance plot missing for inst. 2
F 48	=(f 15 , f 20)	2 4? H m 4?	2 3 H m 4?	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 49	=(f 15 , f 21)	3 4 m H 3	3 4? m H 3	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 50	=(f 17 , f 17)	m H m H H	H H H H H	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 51	=(f 17 , f 20)	H H H H H	H H H H H	0 0 0 0 0	0 1 0 0 0	H H H H H	
F 52	=(f 17 , f 21)	H 3? H m? H	H H H H H	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 53	=(f 20 , f 20)	5 5 5 5 3	5 5 5 5 3?	0 0 0 0 0	0 0 0 0 0	H H H H H	front looks symmetric
F 54	=(f 20 , f 21)	m m 2 m 4	m m 2 3 2	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 55	=(f 21 , f 21)	2 m m 4 m	1 1 1 1 2	0 0 0 0 0	0 0 0 0 0	H H H H H	no gaps visible in Pareto front (except for inst. 5)
F 56	=(f 1 , f 3)	H m m H H	m m m H H	0 0 0 0 0	0 0 0 0 0	H H H H H	inst. 1 and 5 have same Pareto set than for f57 !
F 57	=(f 1 , f 4)	H H m H H	m m m H H	0 0 0 0 0	0 0 0 0 0	H H H H H	inst. 1 and 5 have same Pareto set than for f56 !
F 58	=(f 1 , f 5)	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	1 1 1 1 1	Pareto set touches boundary for all instances
F 59	=(f 2 , f 3)	H H m H H	H m m m H	0 0 0 0 0	0 0 0 0 0	H H H H H	inst. 1 and 5 have same Pareto set than for f60 !
F 60	=(f 2 , f 4)	H H H m H	H m m m H	0 0 0 0 0	0 0 0 0 0	H H H H H	inst. 1 and 5 have same Pareto set than for f59 !
F 61	=(f 2 , f 5)	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	1 1 1 1 1	1 1 1 1 1	not 100% sure that Pareto set is truly outside [-5,-5]
F 62	=(f 3 , f 4)	H H H H H	H H H H H	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 63	=(f 3 , f 5)	H H H H H	H H H H H	0 0 0 0 0	0 1 1 0 0	H H H H H	Pareto set touches boundary for all instances
F 64	=(f 4 , f 5)	H H H H H	H H H H H	0 0 0 0 0	0 0 0 0 0	H H H H H	Pareto set touches boundary for all instances
F 65	=(f 6 , f 7)	H m H H m	H H H H H	0 0 0 0 0	0 0 1 1 0	? ? ? ? ?	gradient length plots w/ 1 color, #Pareto set parts likely also H in inst. 2&5
F 66	=(f 6 , f 9)	1 2 1 3 1	1 1 1 1 1	0 0 0 0 0	0 0 0 1 0	? ? ? ? ?	
F 67	=(f 7 , f 8)	H H H H H	H H H H H	0 0 0 0 0	0 0 0 0 0	? ? ? ? ?	gradient length plots with single color
F 68	=(f 7 , f 9)	H H H H H	H H H H H	0 0 0 0 0	0 0 0 0 0	? ? ? ? ?	gradient length plots with single color
F 69	=(f 8 , f 9)	1 1 1 2 2	1 1 1 1 1	1 0? 0? 0? 0?	0 0 0 0 0	1 1 1 2 2	basins of attractions induced from dominance rank plot
F 70	=(f 10 , f 11)	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	1 1 1 1 1	local dominance and gradient lengths inconclusive
F 71	=(f 10 , f 12)	1 1 1 1 1	1 1 1 1 1	0? 0? 0? 0? 0?	0 0 0 0 0	1 1 1 1 1	local dominance and gradient lengths inconclusive
F 72	=(f 10 , f 13)	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	0 0 1 0 0	1 1 1 1 1	local dominance and gradient lengths inconclusive
F 73	=(f 10 , f 14)	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	0 0 0 0 0	1 1 1 1 1	local dominance and gradient lengths inconclusive
F 74	=(f 11 , f 12)	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	0 0 1 0 1	1 1 1 1 1	local dominance and gradient lengths inconclusive
F 75	=(f 11 , f 13)	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	0 0 1 0 1	1 1 1 1 1	local dominance and gradient lengths inconclusive
F 76	=(f 11 , f 14)	1 1 1 1 1	1 1 1 1 1	0 0 0 0 0	0 0 0 0 0	1 1 1 1 1	local dominance plot for inst. 1 missing
F 77	=(f 12 , f 13)	1 1 2 1 1	1 1 1 1 1	1? 0 0 0 0	0 1 1 0 0	1 1 1 1 1	
F 78	=(f 12 , f 14)	2 2 1 2 1	1 1 1 1 1	1? 1? 0 1? 1?	1 1 0 1 0	1 1 1 1 1	
F 79	=(f 15 , f 18)	H m H H H	H H H H H	0 0 0 0 0	1 0 1 1 0	H H H H H	
F 80	=(f 15 , f 19)	H m H 4 m	H m H 4 m	0 0 0 0 0	0 0 1 0 0	H H H H H	
F 81	=(f 17 , f 18)	m H H H H	H H H H H	0 0 0 0 0	0 0 1 0 1	H H H H H	
F 82	=(f 17 , f 19)	3? H 4? H H	H H H H H	0 0 0 0 0	0 0 0 0 0	H H H H H	
F 83	=(f 18 , f 19)	4? H 4? H H	H H H H H	0 0 0 0 0	0 1 0 0 0	H H H H H	
F 84	=(f 20 , f 22)	3 2 5 5 4	3 2 3 5 2	0 0 0 0 0	0 0 0 0 0	H H H H H	

F 85	=(f 20 , f 23)	4	m	3	4	3	4	2?	m	m	4	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H
F 86	=(f 20 , f 24)	4	H	H	H	m	m	H	H	H	H	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H
F 87	=(f 21 , f 22)	m	m	m	H	3	3	1	2	2	1	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H
F 88	=(f 21 , f 23)	2	2	2	2	2	m	m	m	3	4	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H
F 89	=(f 21 , f 24)	H	H	H	H	H	H	H	H	H	H	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H
F 90	=(f 22 , f 23)	3	m	2	2	3	m	m	3	H	H	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H
F 91	=(f 22 , f 24)	H	H	H	H	H	H	H	H	H	H	0	0	0	0	0	0	0	0	0	0	H	H	H	H	H
F 92	=(f 23 , f 24)	m	m	m	3	m	m	m	3	m		0	0	0	0	0	0	0	0	0	0	H	H	H	H	H

Pareto set could have more parts (but invisible in plots)

Pareto set in inst. 4 touches the boundary