Report and analysis on implementation of IMM algorithm for multiple-model dynamics tracking

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int

case 1: consensus rate = 20			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.1078	0.2578	0.3960
R1,Q2	0.1094	0.2694	0.4671
R2,Q1	0.0505	0.1210	0.2491
R2,Q2	0.0514	0.1313	0.2549
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.1609	0.1762	2.0937
R1,Q2	0.1625	0.1907	1.0347
R2,Q1	0.0799	0.0877	0.4310
R2,Q2	0.0815	0.0926	0.4445

case 1: consensus rate = 10			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.1110	0.2831	0.4460
R1,Q2	0.1129	0.2940	0.5227
R2,Q1	0.0516	0.1406	0.2226
R2,Q2	0.0519	0.1331	0.2429
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.1455	0.1678	0.9
R1,Q2	0.1478	0.1926	1.5835
R2,Q1	0.0751	0.0853	0.4441
R2,Q2	0.0756	0.0824	0.4522

case 1: consensus rate = 5			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.1158	0.3516	1.2838
R1,Q2	0.1192	0.3245	0.5018
R2,Q1	0.0553	0.1649	0.3532
R2,Q2	0.0542	0.1649	0.2246
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.1302	0.2460	1.808
R1,Q2	0.1359	0.1700	1.7787
R2,Q1	0.0666	0.0762	0.762
R2,Q2	0.0661	0.0738	0.4450

case 1: consensus rate = 2			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.1158	0.3516	1.2838
R2,Q1	0.0598	0.1925	0.2654
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.1320	0.2460	1.808
R2,Q1	0.0617	0.0741	0.4368

case 1: consensus rate = 1			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.4265	1.6287	4.5672
R2,Q1	0.0757	0.204	0.2612
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.3755	0.8706	5.9070
R2,Q1	0.0766	0.1128	0.4872

case 1: consensus rate = 2			
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.1790	0.2278	1.7442
R1,Q2	0.1800	0.2782	6.4459
R2,Q1	0.3961	0.0930	0.0850
R2,Q2	0.0864	0.0973	0.7242

Sensor			
Measured	Mean of means	Max of means	max of maxs
R1,Q1	0.3986	1.1896	1.5352
R2,Q1	0.1577	0.5381	0.6675

case 2: consensus rate = 20			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.1167	0.3027	0.7750
R1,Q2	0.1132	0.2847	0.6577
R2,Q1	0.0512	0.1325	0.2315
R2,Q2	0.0539	0.1454	0.2334
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.0771	0.0903	0.4918
R1,Q2	0.1664	0.2726	1.0990
R2,Q1	0.0771	0.0903	0.4918
R2,Q2	0.0804	0.0947	0.4190

case 2: consensus rate = 10			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.1228	0.3438	0.5992
R1,Q2	0.1214	0.3291	0.7441
R2,Q1	0.0535	0.1536	0.2525
R2,Q2	0.0539	0.1439	0.2396
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.1566	0.1938	0.8766
R1,Q2	0.1577	0.2278	2.4168
R2,Q1	0.0742	0.0906	0.3968
R2,Q2	0.0759	0.0935	0.4782

case 2: consensus rate = 5			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.1984	0.7467	2.3522
R1,Q2	0.1925	0.5871	2.2983
R2,Q1	0.0604	0.1829	0.4389
R2,Q2	0.0628	0.1873	0.2912
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.2135	0.7295	2.4394
R1,Q2	0.2116	0.5412	2.7371
R2,Q1	0.0722	0.1012	0.4599
R2,Q2	0.0742	0.1077	0.5699

case 2: consensus rate = 2			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.6709	3.2770	8.4954
R2,Q1	0.1392	0.6907	2.0562
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.07629	2.5799	9.3296
R2,Q1	0.1585	0.5868	2.1211

case 2: consensus rate = 20			
IMM	Mean of means	Max of means	max of maxs
R1,Q1	0.3883	2.3273	5.1490
W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.3867	1.3242	5.3175

W/O Cons	Mean of means	Max of means	max of maxs
R1,Q1	0.1784	0.2516	1.5541
R1,Q2	0.1795	0.2145	0.9872
R2,Q1	0.0845	0.0962	0.6888
R2,Q2	0.0843	0.1090	0.9289

Sensor			
Measure	Mean of means	Max of means	max of maxs
R1,Q1	0.3985	1.2407	1.7790
R2,Q1	0.1574	0.5454	0.7139