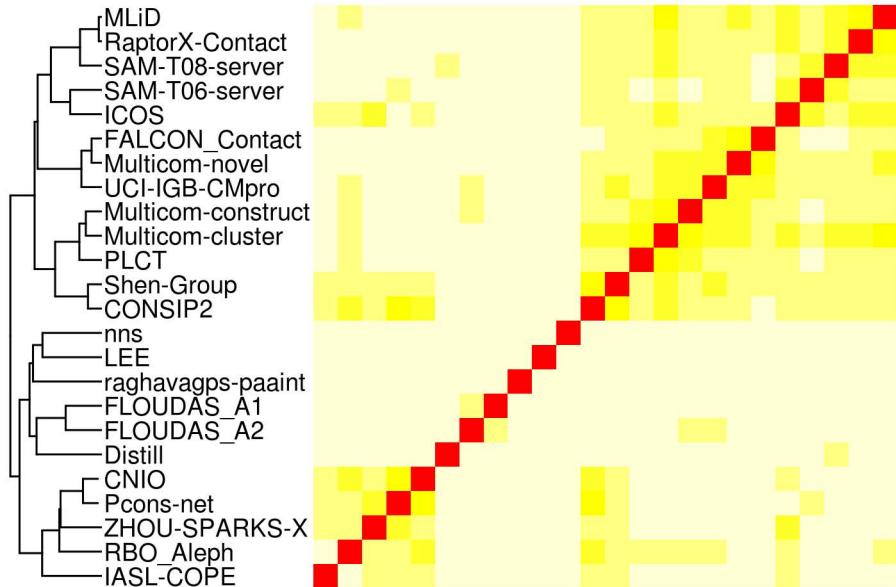
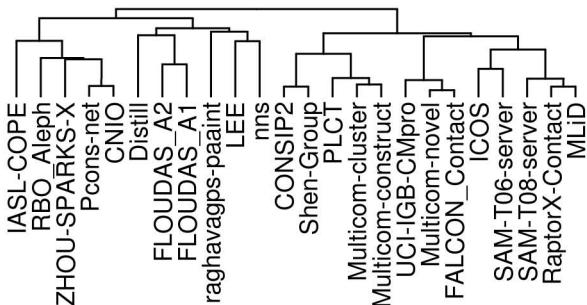
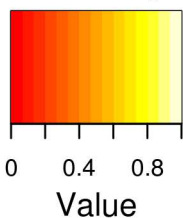


Color Key



■ FM ■ FM, TBM-hard

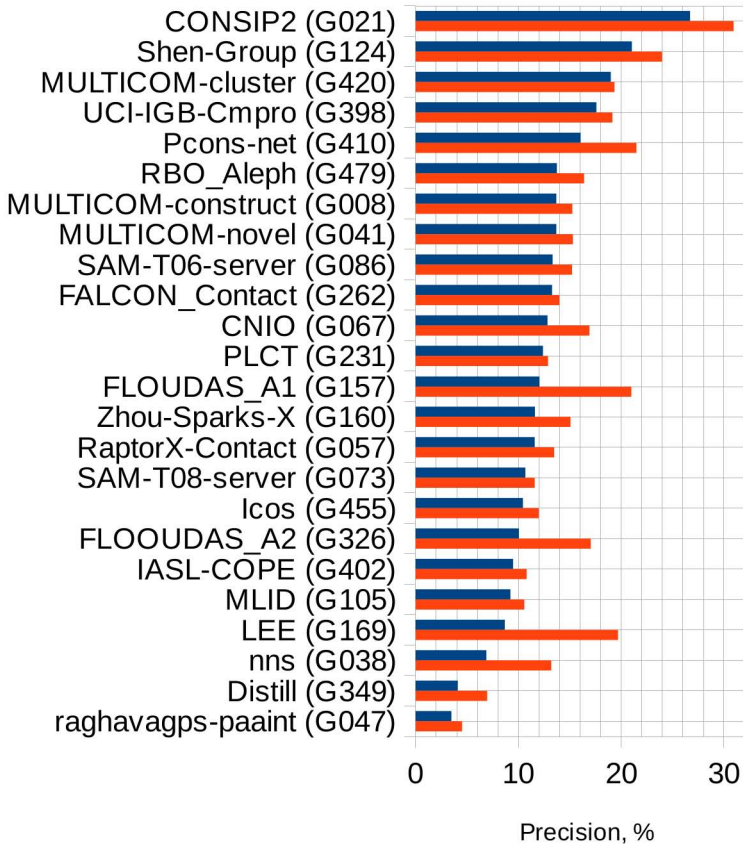


Table S1. Results of the paired two-tailed Student's tests for top 12 CASP11 contact predictors according to the X_d score on the FM set.

	G021	G420	G124	G057	G086	G073	G398	G479	G455	G008	G231	G041
G021	-	37	35	40	26	29	40	36	39	39	36	38
G420	0.085	-	32	37	26	29	37	33	36	36	35	35
G124	0.154	0.770	-	35	22	25	35	33	34	34	33	33
G057	0.019	0.162	0.610	-	26	29	40	36	39	39	36	38
G086	0.002	0.016	0.083	0.068	-	26	26	22	25	26	24	25
G073	0.002	0.002	0.095	0.046	0.941	-	29	25	28	29	27	27
G398	0.003	0.107	0.403	0.418	0.915	0.730	-	36	39	39	36	38
G479	0.023	0.280	0.329	0.317	0.675	0.836	0.964	-	35	35	32	34
G455	<0.001	0.001	0.030	0.039	0.948	0.844	0.839	0.826	-	38	35	37
G008	0.001	0.010	0.121	0.135	0.902	0.797	0.592	0.497	0.856	-	35	37
G231	<0.001	0.002	0.038	0.054	0.469	0.689	0.345	0.424	0.884	0.571	-	34
G041	<0.001	0.001	0.003	0.009	0.439	0.415	0.259	0.293	0.210	0.661	0.646	-

The below the diagonal part of the table displays the t-test probability p that the observed differences in the results are due to chance. The above the diagonal part of the table shows the numbers of common domains (out of 40 max in the RL analysis). Cells corresponding to the statistically similar pairs of groups at the confidence level of 95% ($p > 0.05$) are shaded grey.

Table S2. Head-to-head comparisons of the top 12 groups according to the *Xd* score on the FM domain set.

	G021	G420	G124	G057	G086	G073	G398	G479	G455	G008	G231	G041
G021	-	62.16%	65.71%	65.00%	73.08%	79.31%	70.00%	58.33%	76.92%	74.36%	69.44%	76.32%
G420	37.84%	-	56.25%	59.46%	69.23%	72.41%	59.46%	66.67%	77.78%	69.44%	71.43%	80.00%
G124	34.29%	43.75%	-	54.29%	63.64%	64.00%	57.14%	51.52%	64.71%	58.82%	63.64%	75.76%
G057	32.50%	40.54%	45.71%	-	53.85%	58.62%	55.00%	63.89%	56.41%	61.54%	61.11%	63.16%
G086	26.92%	30.77%	36.36%	46.15%	-	53.85%	50.00%	54.55%	44.00%	46.15%	54.17%	52.00%
G073	20.69%	27.59%	36.00%	37.93%	46.15%	-	37.93%	52.00%	46.43%	44.83%	59.26%	59.26%
G398	27.50%	40.54%	42.86%	45.00%	50.00%	62.07%	-	50.00%	58.97%	51.28%	50.00%	60.53%
G479	38.89%	33.33%	48.48%	36.11%	45.45%	48.00%	50.00%	-	60.00%	65.71%	59.38%	61.76%
G455	20.51%	22.22%	35.29%	43.59%	56.00%	53.57%	41.03%	40.00%	-	47.37%	48.57%	62.16%
G008	25.64%	30.56%	41.18%	38.46%	53.85%	55.17%	48.72%	34.29%	52.63%	-	57.14%	62.16%
G231	30.56%	25.71%	36.36%	38.89%	45.83%	40.74%	47.22%	40.63%	51.43%	42.86%	-	52.94%
G041	23.68%	20.00%	24.24%	36.84%	48.00%	40.74%	36.84%	38.24%	37.84%	37.84%	47.06%	-

Each cell displays the percentage of common domains for which a group in the row has a higher score than the group in the column. Numbers for the same pair of groups on both sides of the diagonal may not add to 100% as ties are not counted.

Table S3. Results of the paired two-tailed Student's tests for top 12 CASP11 contact predictors according to the MCC score on the FM set.

	G420	G021	G086	G008	G105	G073	G455	G398	G057	G169	G124	G157
G420	-	37	26	36	37	29	36	37	37	27	32	26
G021	0.491	-	26	39	40	29	39	40	40	30	35	29
G086	0.077	0.460	-	26	26	26	25	26	26	19	22	20
G008	0.010	0.217	0.962	-	39	29	38	39	39	30	34	29
G105	0.002	0.327	0.931	0.970	-	29	39	40	40	30	35	29
G073	<0.001	0.186	0.278	0.653	0.479	-	28	29	29	21	25	21
G455	<0.001	0.068	0.048	0.264	0.128	0.064	-	39	39	29	34	28
G398	0.002	0.031	0.069	0.059	0.111	0.070	0.448	-	40	30	35	29
G057	<0.001	0.025	0.094	0.023	<0.001	0.069	0.151	0.884	-	30	35	29
G169	0.001	0.086	0.101	0.038	0.031	0.025	0.227	0.257	0.566	-	30	26
G124	0.010	0.101	0.609	0.067	0.167	0.471	0.566	0.544	0.799	0.905	-	29
G157	0.019	0.075	0.471	0.093	0.122	0.367	0.365	0.398	0.631	0.979	0.661	-

The below the diagonal part of the table displays the t-test probability p that the observed differences in the results are due to chance. The above the diagonal part of the table shows the numbers of common domains (out of 40 max in the RL analysis). Cells corresponding to the statistically similar pairs of groups at the confidence level of 95% ($p > 0.05$) are shaded grey.

Table S4. Head-to-head comparisons of the top 12 groups according to the MCC score on the FM domain set.

	G420	G021	G086	G008	G105	G073	G455	G398	G057	G169	G124	G157
G420	-	62.16%	53.85%	80.56%	72.97%	82.76%	75.00%	75.68%	83.78%	88.89%	84.38%	92.31%
G021	37.84%	-	42.31%	53.85%	40.00%	51.72%	53.85%	52.50%	57.50%	53.33%	65.71%	58.62%
G086	46.15%	57.69%	-	65.38%	61.54%	53.85%	56.00%	73.08%	69.23%	78.95%	77.27%	75.00%
G008	19.44%	46.15%	34.62%	-	43.59%	44.83%	55.26%	56.41%	69.23%	70.00%	70.59%	75.86%
G105	27.03%	60.00%	38.46%	56.41%	-	58.62%	58.97%	65.00%	70.00%	76.67%	68.57%	79.31%
G073	17.24%	48.28%	46.15%	55.17%	41.38%	-	64.29%	58.62%	79.31%	80.95%	72.00%	85.71%
G455	25.00%	46.15%	44.00%	44.74%	41.03%	32.14%	-	56.41%	53.85%	68.97%	64.71%	67.86%
G398	24.32%	25.00%	26.92%	43.59%	35.00%	41.38%	43.59%	-	42.50%	60.00%	57.14%	65.52%
G057	16.22%	37.50%	30.77%	30.77%	30.00%	20.69%	46.15%	52.50%	-	66.67%	54.29%	79.31%
G169	11.11%	43.33%	21.05%	30.00%	23.33%	19.05%	31.03%	40.00%	33.33%	-	53.33%	61.54%
G124	15.63%	22.86%	22.73%	29.41%	28.57%	28.00%	35.29%	25.71%	40.00%	46.67%	-	44.83%
G157	7.69%	31.03%	25.00%	24.14%	17.24%	14.29%	32.14%	20.69%	17.24%	38.46%	37.93%	-

Each cell displays the percentage of common domains for which a group in the row has a higher score than the group in the column. Numbers for the same pair of groups on both sides of the diagonal may not add to 100% as ties are not counted.

Table S5. The results of inter-domain contact analysis.

GROUPS	FP	TP	Prec, %
FLOUDAS_A1 (G157)	579	36	5.9
FLOUDAS_A3 (G235)	218	10	4.4
CONSHIP2 (G021)	1056	44	4
myprotein-me (G216)	504	16	3.1
SAM-T08-server (G073)	709	23	3.1
Shen-Group (G124)	995	27	2.6
MULTICOM-novel (G041)	1034	27	2.5
Pcons-net (G410)	1060	21	1.9
FLOUDAS_A2 (G326)	613	10	1.6
MULTICOM-cluster (G420)	938	13	1.4
RBO_Aleph (G479)	1016	13	1.3
FALCON_Contact (G262)	1145	13	1.1
IASL-COPE (G402)	849	9	1
Distill (G349)	871	9	1
PLCT (G231)	892	8	0.9
MLID (G105)	985	9	0.9
MULTICOM-construct (G008)	978	9	0.9
Icos (G455)	958	8	0.8
LEE (G169)	784	4	0.5
SAM-T06-server (G086)	734	4	0.5
RBO-human (G287)	260	1	0.4
CNIO (G067)	949	4	0.4
nns (G038)	977	4	0.4
UCI-IGB-Cmpro (G398)	1155	3	0.3
RaptorX-Contact (G057)	1155	3	0.3
Zhou-Sparks-X (G160)	593	1	0.2
Raghavagps-paint (G047)	982	1	0.1
eThread (G454)	568	0	0
FoDTcm (G283)	570	0	0