

Figure 1 Performance profiles over all the instances solved to optimality by both algorithms ( $s = \text{BDDF}, \text{ATIF}$ )

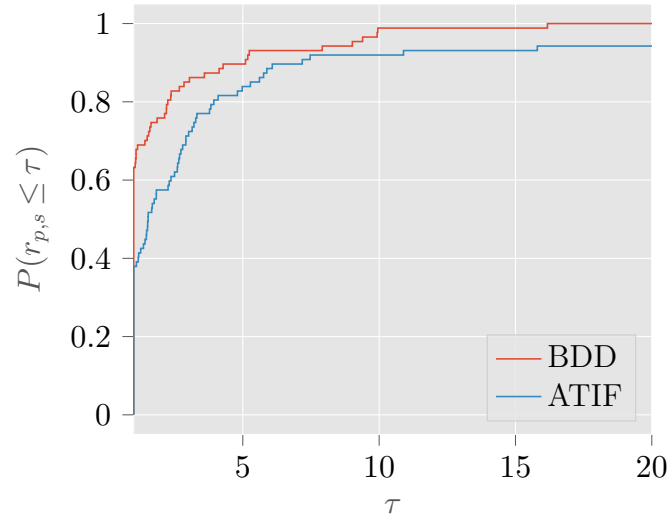


Table 1 Summary of the results for the exact procedures

$n$	$m$	ATIF		BDDF		
		<i>avg time</i>	<i>solved</i>	<i>avg time</i>	<i>solved</i>	<i>avg time all</i>
40	2	55.51	25	40.45	25	26.29
40	4	30.16	25	7.60	25	5.00
50	2	18.65	25	56.27	25	40.85
50	4	272.59	25	25.31	25	17.43
100	2	852.23	24	756.88	16	520.94
100	4	7,396.23	22	847.54	19	642.13

Performance profile curves

Table

**Figure 2** Performance profiles per instance class ( $s = \text{BDDF}, \text{ATIF}$ )