Best LKH Solutions for T_{nm} Instances

Keld Helsgaun, August 28, 2018

Parameter file:

    PROBLEM_FILE = Tnm$1.tsp
    CANDIDATE_SET_TYPE = POPMUSIC
    POPMUSIC_SAMPLE_SIZE = 100
    POPMUSIC_TRIALS = 0
    MAX_CANDIDATES = 100
    RUNS = 100
    SEED = 0

Instance	Length	Optimum
Tnm52	595245	yes
Tnm55	605778	yes
Tnm58	660687	yes
Tnm61	716131	yes
Tnm64	770162	yes
Tnm67	825328	yes
Tnm70	881036	yes
Tnm73	937270	yes
Tnm76	992501	yes
Tnm79	1046723	yes
Tnm82	1101472	yes
Tnm85	1156182	yes
Tnm88	1172734	yes
Tnm91	1228726	yes
Tnm94	1285416	yes
Tnm97	1342086	yes
Tnm100	1398070	yes
Tnm103	1453924	yes
Tnm106	1510244	yes
Tnm109	1566882	yes
Tnm112	1623916	yes
Tnm115	1641752	yes
Tnm118	1698486	yes
Tnm121	1755689	yes
Tnm124	1813276	yes
Tnm127	1871162	yes
Tnm130	1928734	yes
Tnm133	1986365	yes
Tnm136	2043460	yes
Tnm139	2100488	yes
Tnm142	2156575	yes

Tnm145	2212959	yes
Tnm148	2235669	yes
Tnm151	2293265	yes
Tnm154	2350345	yes
Tnm157	2407153	yes
Tnm160	2463857	yes
Tnm163	2520720	yes
Tnm166	2577871	yes
Tnm169	2635266	yes
Tnm172	2692898	yes
Tnm175	2750701	yes
Tnm178	2771953	yes
Tnm181	2829701	yes
Tnm184	2887675	yes
Tnm187	2945939	yes
Tnm190	3004259	yes
Tnm193	3062384	yes
Tnm196	3120127	yes
Tnm199	3178031	yes
Tnm202	3236103	?
Tnm205	3294362	?
Tnm208	3315695	?
Tnm211	3374495	?
Tnm214	3432451	?
Tnm217	3490603	?
Tnm220	3548986	?
Tnm223	3607534	?
Tnm226	3666293	?
Tnm229	3725231	?
Tnm232	3784177	?
Tnm235	3803628	?
Tnm238	3862328	?
Tnm241	3921208	?
Tnm244	3980210	?
Tnm247	4039247	?
Tnm250	4098408	?
Tnm253	4157741	?
Tnm256	4217188	?
Tnm259	4276793	?
Tnm262	4336265	?
Tnm265	4395285	?
Tnm268	4413107	?
Tnm271	4472627	?
Tnm274	4532271	?
Tnm277	4592044	?
Tnm280	4651919	?
Tnm283	4711479	?
Tnm286	4770692	?

Tnm289	4830007	?
Tnm292	4889424	?
Tnm295	4907405	?
Tnm298	4967403	?
Tnm301	5027506	?
Tnm304	5087101	?
Tnm307	5146554	?
Tnm310	5206101	?
Tnm313	5265747	?
Tnm316	5324503	?
Tnm319	5383361	?
Tnm322	5442345	?
Tnm325	5501419	?
Tnm328	5522747	?
Tnm331	5582536	?
Tnm334	5642396	?
Tnm337	5701409	?
Tnm340	5760541	?
Tnm343	5819743	?
Tnm346	5879051	?
Tnm349	5938418	?
Tnm352	5997812	?
Tnm355	6057283	?
Tnm358	6078626	?
Tnm361	6137976	?
Tnm364	6197407	?
Tnm367	6256862	?
Tnm370	6316367	?
Tnm373	6375946	?
Tnm376	6435602	?
Tnm379	6495350	?
Tnm382	6555163	?
Tnm385	6614974	?
Tnm388	6634794	?
Tnm391	6694466	?
Tnm394	6754206	?
Tnm397	6814019	?
Tnm400	6873898	?

Best LKH Solutions for Some Large T_{nm} Instances

Keld Helsgaun, September 5, 2018

Instance	Length
Tnm502	8749995
Tnm601	10615504
Tnm700	12488518
Tnm802	14377678
Tnm901	16256023
Tnm1000	18137296
Tnm2002	37029600
Tnm3001	55939349
Tnm4000	74858233
Tnm5002	93784081
Tnm6001	112708118
Tnm7000	131633371
Tnm8002	150561446
Tnm9001	169487546
Tnm10000	188414262
Tnm20002	377692238
Tnm30001	566973296
Tnm40000	756254243
Tnm50002	945539807
Tnm60001	1134820740
Tnm70000	1324101816
Tnm80002	1513392208
Tnm90001	1702667051
Tnm100000	1891945975