



## Comparison of three approaches:

- 1. Exact algorithm (concorde<sup>1</sup>)
- 2. Approximation using Ant Colony Optimization (ACO):
  Parameters as stated on the exercise sheet, 10 ants and 100 iterations
- 3. Blind Search:1000 function evaluations (as for ACO)

	ulysses16	ulysses22
Optimal	6859	7013
ACO	6859 - 7000	7013 - 7200
Blind Search	9000 – 10000	11000 - 13000

Table: Rough scale of resulting tour lengths; ACO finds optimal solution in approximately 1 out of 5 runs for ulysses16 and 1 out of 10 for ulysses22

<sup>1</sup>http://www.math.uwaterloo.ca/tsp/concorde.html