

3rd Collab Workshop

Holmenkollen Park Hotel, Oslo, Norway

May 10-12 2011

- Sanatorium built 1894
- Dragon style
- Hotel from 1914
- The Germans WW II
- Renovation 1948
- Modern part 1982 WC
- 1991 conference centre
- Norway's leading hotel 2010
- Holmenkollen ski arena
- World cup 1966, 1982, february 2011















1st Canadian male WC medal in Nordic skiing

Alex Harvey and Devon Kershaw



Why do we bother ...

NASJON	GULL	SØLV	BRONSE	TOTALT
Norge	8	6	6	20
Østerrike	7	2	1	10
Sverige	2	2	1	5
Tyskland	1	4	3	8
Finland	1	1	2	4
Frankrike	1	0	1	2
Canada	1	0	0	1
Polen	0	2	2	4
Russland	0	2	2	4
Italia	0	2	0	2
Slovenia	0	0	2	2
Sveits	0	0	1	1

The Collab project

- “Researcher project” financed by the SMARTRANS programme of the Research Council of Norway
- Associated partners
 - CIRRELT, Michel Gendreau
 - Olli Bräysy
 - ITMMA, University of Antwerp, Wout Dullaert
 - INRIA Lille, El-Ghazali Talbi
- March 2009 until June 2012
- Total budget 4000 kNOK (roughly 500 k€, 670 kCAD)
 - 2000 kNOK postdoc
 - 1460 kNOK SINTEF manpower and direct costs
 - 540 kNOK associated partners

Main goals

- Improve the efficiency of transportation through more powerful fleet management and route finding ITS tools
- by developing parallel and heterogeneous optimization methods
 - commodity computers
 - fine-grained – coarse grained
 - heterogeneous computing
- Develop parallel and collaborative optimization methods for optimized fleet management and route finding (industrial VRP and SPP)
- Perform experiments on industrial test cases and standard benchmarks from the literature
- 10 papers in well-reputed scientific journals, and give 15 talks at major, international conferences
- Organize scientific workshops, and an industry seminar

Collab status

- Parallelization of a solver for rich VRP (Spider)
 - parallel evaluation of neighborhoods, using multiple threads
 - more work than anticipated (as reported by Morten i April)
- TSP solver based on heterogeneous computing (Atle)
- INRIA Lille associated partner
- Christian engaged as postdoc from 20100101
- Heterogeneous VRP solver, DVRP «Camel Spider»
- 1st Collab workshop April 2010, Asker, Norway
- 2nd Collab workshop October 2010, Djerba, Tunisia
- [Metaheuristics on graphics hardware](#) session at [META'10](#)
- [Publications](#)
- Special Issue Journal of Parallel and Distributed Computing «[Metaheuristics on GPU](#)», deadline extended to May 31 2011
- 3rd Collab workshop May 2011 - [Program](#)