

# 1st Collab workshop 11.-13. April 2010

## Themes and goals

- Collab project – common understanding
  - parallel methods for VRP and SPP
- Survey and future trends
  - architectures, platforms, environments, frameworks ... for parallel and heterogeneous computing
  - methods for VRP and SPP
- Present recent / ongoing work / plans
- New ideas
- Collab plans
- Have fun ...

# Participants

- Michel Gendreau, CIRRELT
- El-Ghazali Talbi, INRIA
- Thé Van Luong, INRIA
- Olli Bräysy
- Andreas Reinholz
- Arne Løkketangen, Høgskolen i Molde
- Jin Jianyong, Høgskolen i Molde
- Trond Runar Hagen, SINTEF
- Oddvar Kloster, SINTEF
- Atle Riise, SINTEF
- Christian Schulz, SINTEF
- Morten Smedsrud, SINTEF
- Geir Hasle, SINTEF

		<b>Sunday April 11</b>	<b>Monday April 12</b>	<b>Tuesday April 13</b>
09:00	10:30		Session 1	Session 5
10:30	11:00		Coffee break	Coffee break
11:00	12:30		Session 2	Session 6
12:30	14:00		Lunch	Lunch
14:00	15:30		Session 3	Session 7 and closure
15:30	16:00		Coffee break	
16:00	17:30		Session 4	
17:30	19:30		Spa / on your own	
19:30			Dinner	
	19:15	Departure to Asker		
19:30	22:00	Dinner Akutten Tapas		

# Sketch of program (1)

## ■ Surveys

- Collab project Geir
- Parallel and heterogeneous computing Trond
- Parallel VRP Geir
- Parallel SPP Oddvar

## ■ Targeted problems

- Waste management Olli
- Media product distribution Geir
- Decomposition and aggregation heuristics for solving large-scale multi-criteria DVRPs Geir
- Rich VRP Geir
- Dynamic SPP in intermodal transportation Oddvar

# Sketch of program (2)

## ■ Recent / ongoing / planned work

- Metaheuristics on GPU
- GPU-based Local Search for Permutations
- Multi-threaded Spider (sic!)
- VRP solver based on heterogeneous computing
- Parallel VRP solver
- Decomposition and parallelization for the VRP

Thé Van  
Atle  
Morten  
Christian  
Andy  
Michel

## ■ Ideas

- Some thoughts on parallelization and optimization

Arne

## ■ Plans