

19th Geilo Winter School in eScience



Outline

- About the winter school
- Practical information
- This years topic and program

What is the winter school?

- Started by Knut-Andreas Lie in 2001
- Held annually the end of January at Dr. Holms Hotel, Geilo

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
07:00 - 09:00		Breakfast				
09:00 - 10:30		Lecture	Lecture	Lecture	Lecture	Lecture
10:30 - 12:30						Lecture
12:30 - 14:45		Break (lunch 12:30 - 14:00)				Lunch, End
15:00 - 16:30		Lecture	Lecture	Lecture	Lecture	
16:30 - 17:00		Coffee				
17:00 - 18:30	Lecture	Lecture	Lecture	Lecture / Poster	Lecture	

- Typical schedule consists of 14 double lectures (1.5 hours)
 - The lectures targets Ph.D. students and young researchers
 - Long mid-day break for skiing and socializing
 - Scientific committee helps with topic and lecturers each year



Winter Schools in eScience

- Scientific committee 2016-2020:
 - Inga Berre, University of Bergen
 - Xing Cai, Simula / University of Oslo
 - Anne C. Elster, NTNU
 - Margot Gerritsen, Stanford
 - Helwig Hauser, University of Bergen
 - Trond Kvamsdal, NTNU
 - Knut-Andreas Lie, SINTEF / NTNU
 - Hans Ekkehard Plesser, Norwegian University of Life Sciences
 - Geir Storvik, University of Oslo
 - Ståle Walderhaug, SINTEF / University of Tromsø

What is the winter school?

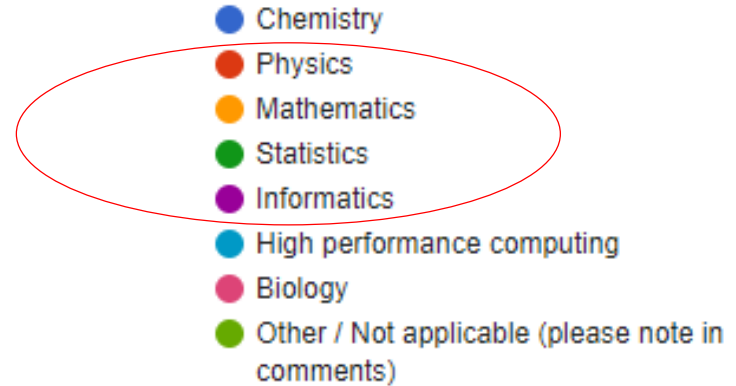
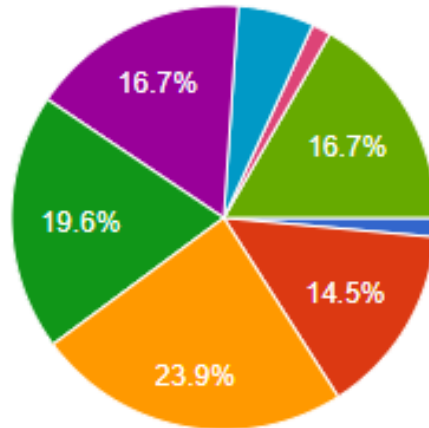
The aim of the winter school is two-fold

1. Learn something about a new topic in eScience
2. Meet and connect with other researchers within a different field of eScience

Who is here now?

Field of research:

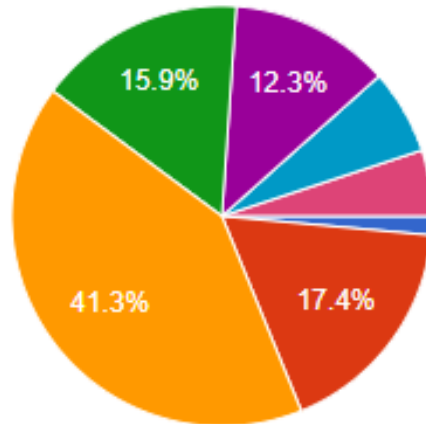
138 responses



Who is here now?

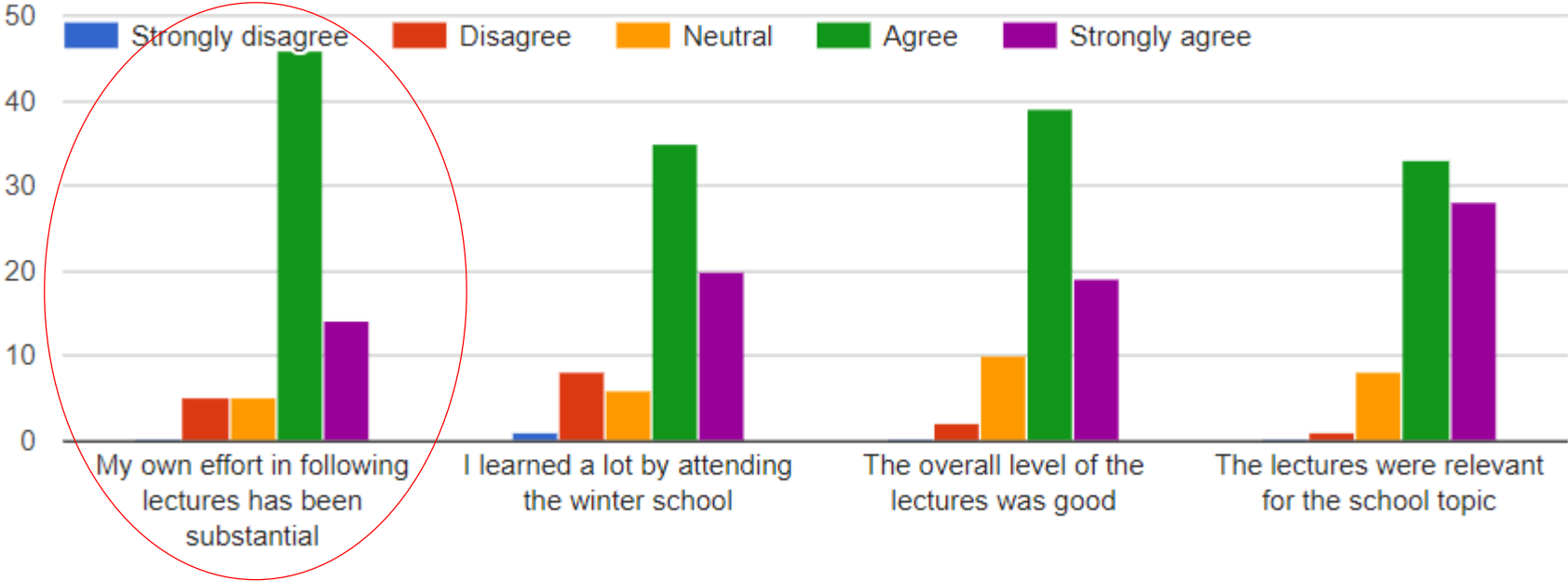
Research level:

138 responses

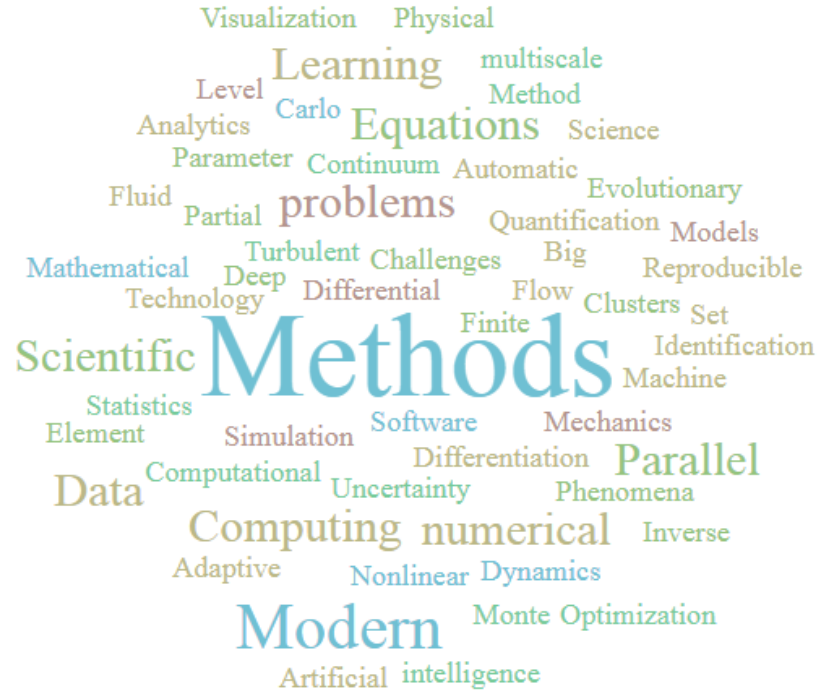


- Bachelor student
- Master student
- PhD student
- Post doc / young researcher
- Associate professor / experienced researcher
- Professor / senior researcher
- Other / Not applicable (please note in comments)

Survey from previous schools

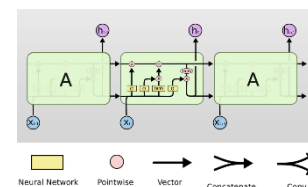
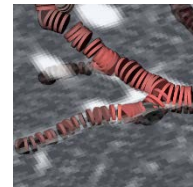
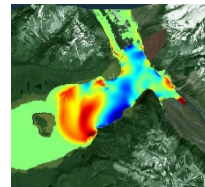
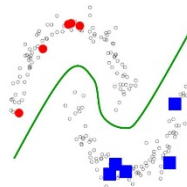
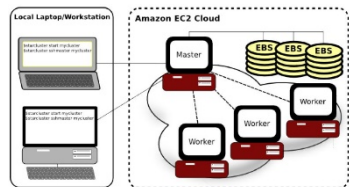
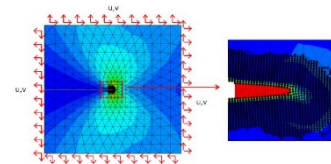
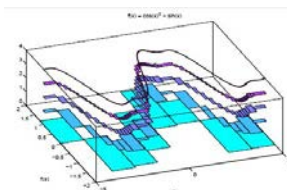
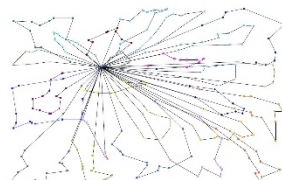
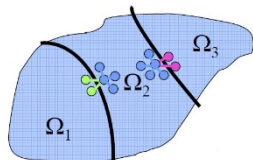
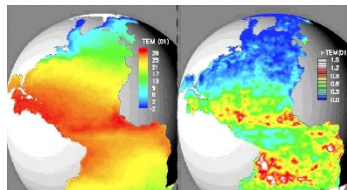
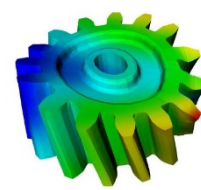
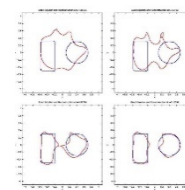
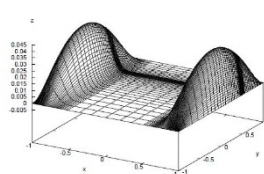
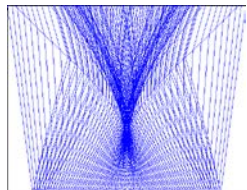
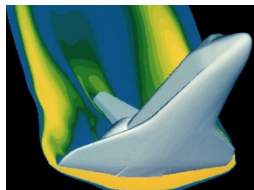


Previous winter school topics



Generated with <https://worditout.com/word-cloud/create>

Previous winter schools



Varied topics within eScience

2001: Cluster computing

2002: Methods for CFD

2003: Nonlinear PDEs

2004: Evolutionary PDEs

2005: Inverse problems

2006: Finite Element method

2007: Monte Carlo methods

2008: Parallel Computing

2009: Optimization

2010: Automatic Differentiation

2011: Multiscale methods

2012: Continuum Mechanics

2013: Reproducible Research

2014: Big data and statistics

2015: Uncertainty Quantification

2016: Scientific Visualization

2017: Machine Learning

2018: Artificial Intelligence

2019: Learning from Data

2020: ???

Winter Schools in eScience



With funding from
The Research Council of Norway

- Funded by the Research Council of Norway
 - 2001-2004: *Winter schools in computational mathematics* (137461)
 - 2005-2006: *Winter schools in computational mathematics* (159868)
 - 2007-2010: *National Arena in eScience* (178774)
 - 2011-2015: *eVita Winter School* (203376)
 - 2016-2020: *Geilo Winter School in eScience* (249772)

Information about Dr. Holms

- Opened in 1909
 - Originally a place for asthmatic city dwellers to get fresh air (Relevant even today!)
 - Rebuilt and extended countless times.
- Meals for those staying at Dr. Holms
 - Breakfast from 7:30 to 9:00
 - Lunch from 12:30 to 14:00
 - Dinner at 19:30
 - Coffee breaks with light snacks
 - Please: no ski boots, shorts, sandals etc. in the dining hall
 - Allergies? Let the hotel know!
- Use the meals and breaks as an opportunity to meet someone new
- All beverages must be paid for separately



Dr. Ingebrikt Christian Holm



Ghost Woman, Nelson Soucasaux

Lunch

- Lunch at Dr. Holms
 - Monday:
 - Tuesday:
 - Wednesday:
 - Thursday:
 - Friday:
- Packed lunch for cross country?
Leave your name at the reception the day before.



Information about Dr. Holms

- Discounted ski passes can be bought at Slaatto
 - 10% discount
 - 4 hour conference card
 - 4 days x 4 hours, etc.
 - Remember to bring your conference discount voucher
- Discounted rental with Geilo Skishop
 - 30% discount: Ask for information at the reception
 - Snowboard, cross country, skate, alpine, slalom, etc.
- Cross country
 - Either around the lake or up towards Prestholtseter (Hallingskarvet)








Information about Dr. Holms

- Skibar – with piano
 - Outside the restaurant
 - Open until 22:00
- Bowl & Dine with bowling hall / diner
 - 50 meters to the right when exiting the hotel by the reception.
 - Open until 22:00
- 1909 Sportsbar
 - Foosball, shuffleboard, etc.
 - Open until 22:00
- Swimming pool and spa department
 - Close to the lecture halls
 - Spa open for reservations
 - Open until 19:00



Weather forecast for Geilo

Langtidsvarsel

Mandag 21. januar 12-18	Tirsdag 22. januar 12-18	Onsdag 23. januar 13-19	Torsdag 24. januar 13-19	Fredag 25. januar 13-19
				
-7°	-10°	-7°	-7°	-9°
0 mm	1,1 mm	0 mm	0 mm	0 mm
				

SNØFORHOLD

🕒 20/01 07:13
Planlagt åpning av skisesong - Planlagt avslutning av skisesong
1/12 - 13/4
Snøforhold: Meget bra

SNØFALL

SATURDAY 19/1	IDAG 20/1	MONDAY 21/1
0cm	0cm	0cm

Øvre område:
70cm

Maskinpreparert

Øvre område:
40cm

SNØDYBDE
I NEDFARTENE

Midtre område:
0cm





I TERRENG
Midtre område:
40cm

Nedre område:
70cm

Maskinpreparert

Nedre område:
40cm

VÆRET

Topp 1178m		Bunn 800m	
	-8°C		SW 1m/s
	-6°C		SW 1m/s

[FULL VÆRMELDING](#)

[SNØHISTORIKK](#)

Internet

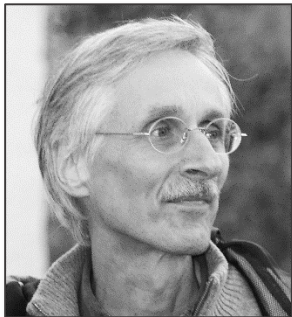
Network name: Dr. Holms Hotel
No password required

With great power comes great responsibility

- Please show respect for our lecturers:
use the internet responsibly and pay attention
- There's ample time during the breaks to check important emails etc.



Lecturers



Hans R. Künsch
ETH Zurich



Jo Eidsvik
NTNU



Remus Hanea
Equinor / Univ. Stavanger



Julien Brajard
Sorbonne univ. / NERSC



Kjetil Olsen Lye
ETH Zurich / SINTEF



André R. Brodtkorb
SINTEF / Oslo Metropolitan univ.

Winter School Program

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
07:30 - 09:00		Breakfast				
09:00 - 09:45		Eidsvik 1	Künsch 1	Brajard 1	Brajard 2	Lye 2
09:45 - 10:30						
10:30 - 11:00		Break				
11:00 - 11:45		(Lunch 12:30 - 14:00)				
11:45 - 12:30						
12:30 - 15:00		Summary				
15:00 - 15:45		Hanea 2	Eidsvik 2	Künsch 2	Lye 1	
15:45 - 16:30						
16:30 - 17:00		Coffee				
17:00 - 17:45	Introduction	Poster	Hanea 3	Eidsvik 3	Künsch 3	
17:45 - 18:30	Hanea 1					
18:30 - 19:15						
19:30		Dinner				

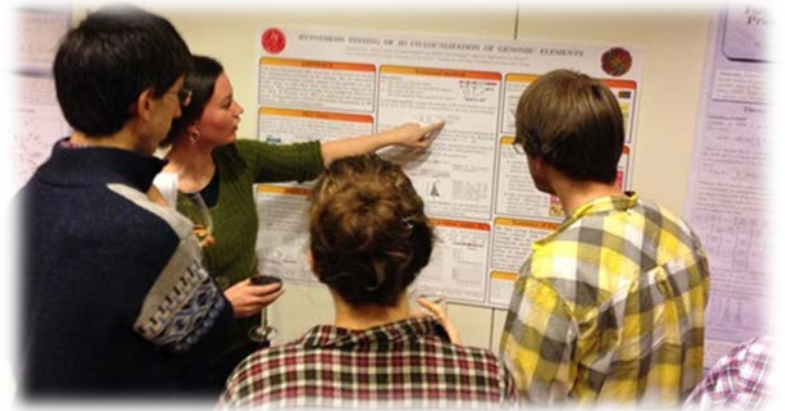
- Lectures start on the hour, not quarter past.
- Show respect for our lecturers and be on time (also for the morning lectures)!
- Today we will have a lecture until about 19:15

Preparation and Installing procedures

- See email sent with installation instructions for
 - Anaconda and Python
 - R
- Note that the internet here tends to break down.

Poster session

- From 17:00 on Monday
- Drink coupon, light finger food
- Wide range of topics
See program for list of presenters
- Hang posters during break on Monday



Welcome

- Thank you all for coming to the winter school
- I truly hope you will have a good week here!