16th Geilo Winter School in eScience
Outline

• About the winter school
• Practical information
• This years topic and program
Winter Schools in eScience

- Started by Knut-Andreas Lie in 2001

- Held annually the end of January at Dr. Holms Hotel, Geilo

- 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
  - School topic chosen by scientific committee each year
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
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**
  - Knut-Andreas Lie, SINTEF / NTNU
  - Hans Ekkehard Plesser, Norwegian University of Life Sciences
  - Geir Storvik, University of Oslo
  - Ståle Walderhaug, SINTEF / University of Tromsø
  - Trond Kvamsdal, NTNU
Winter Schools in eScience

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
Information about Dr. Holms

- Discounted ski passes can be bought at the reception
  - 2 hours for 150 NOK (50 NOK for a reusable keycard)
  - 4 hours for 200 NOK (50 NOK for a reusable keycard)

- Discounted ski passes with ski rental
  - 50% discount: Ask for information at the reception

- You may eat lunch in the slopes:
  - Get a coupon at the reception before 10:00 AM
  - You can also make your own packed lunch during breakfast
Information about Dr. Holms

• Bowl & Dine with bowling hall
  – 50 meters to the right when exiting the hotel by the reception.

• Swimming pool and spa department
  – Close to the lecture halls
  – Spa open for reservations
Weather forecast for Geilo

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Yr.no, Skiinfo.no, 2016-01-17
Internet

Network name: Dr. Holms Hotel
Username: ---
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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.
This year's topic: Scientific Visualization

- What do these numbers mean?
- How can we extract knowledge from data?
- How can we make new discoveries through "properly" exploring data?

Lorenz attractor: User Wikimol, Wikipedia [public domain]
Turbulent flow: User Jw2c, Wikipedia [cc-by-3.0], Colors changed
Winter School Program

- 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
Poster session

- From 18:30 - 19:15 on Wednesday
- Wide range of topics
  See program for list of presenters
- Hang posters during break on Wednesday
- Light refreshments (canapés) and a drink coupon