

15<sup>th</sup> 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

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
07:00 - 09:00		Breakfast				
09:00 - 10:30		Lecture	Lecture	Lecture	Lecture	Lecture
10:30 - 12:30		Break (lunch 12:30 - 14:00)				Lecture
12:30 - 14:45						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



# Winter Schools in eScience

- The school topic is chosen by members of the scientific committee
- Scientific committee 2011-2015:
  - Knut-Andreas Lie, SINTEF and University of Bergen
  - Arnaldo Frigessi, Norwegian Computing Center and University of Oslo
  - Hans Ekkehard Plesser, Norwegian University of Life Sciences
  - Hans Petter Langtangen, Simula Research Laboratory and University of Oslo
  - Jan M. Nordbotten, University of Bergen
  - Knut Mørken, University of Oslo
  - Trond Kvamsdal, NTNU

# 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)

# Information about Dr. Holms

- Opened in 1909
  - Originally a place for asthmatic city dwellers to get fresh air
- Meals
  - 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 me 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

# Information about Dr. Holms

- Discounted ski passes can be bought at the reception
  - 4 hours for 200 NOK (50 NOK for a reusable keycard)
  - 2 hours for 150 NOK (50 NOK for a reusable keycard)
- Discounted ski passes with ski rental
  - Must book in advance by email: [booking@slaattaskisenter.no](mailto:booking@slaattaskisenter.no)
  - 4 hours for 400 NOK (50 NOK for a reusable keycard)
  - 2 hours for 350 NOK (50 NOK for a reusable keycard)
- 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

Sunday 18 January 12–18	Monday 19 January 13–19	Tuesday 20 January 13–19	Wednesday 21 January 13–19	Thursday 22 January 13–19	Friday 23 January 13–19
					
-9°	-10°	-12°	-12°	-12°	-9°
0 mm	0.2 mm	0.1 mm	0 mm	0 mm	0 mm
					

Yr.no, 2015-01-16

# Internet

Network name: Dr. Holms Hotel  
Username: drholms1  
Password: drholms1

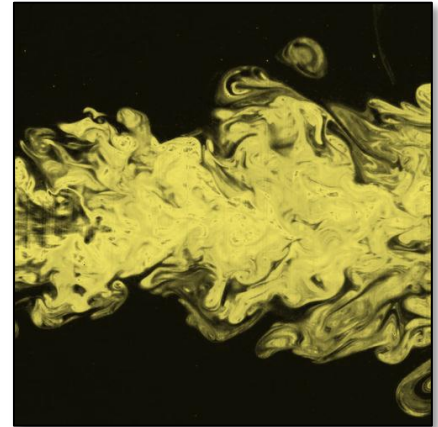
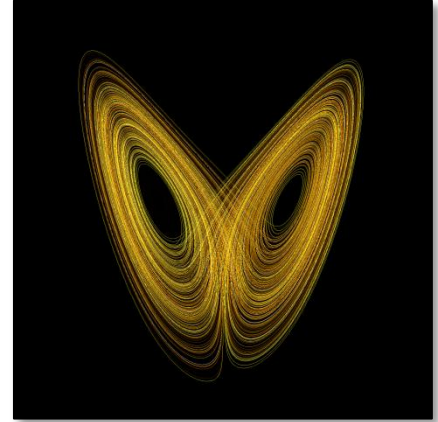
# With great power comes great responsibility

- 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 years topic: Uncertainty Quantification

- Can we trust a single deterministic simulation run?
- How does our result change when we slightly change the input?
- Where is our system most sensitive to perturbations?



Lorenz attractor: User Wikimol, Wikipedia [public domain]

Turbulent flow: User Jw2c, Wikipedia [cc-by-3.0], Colors changed

# Lecturers



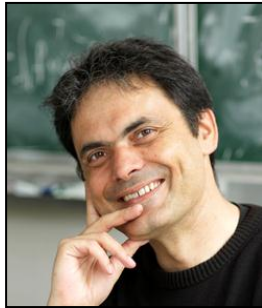
Siddhartha Mishra  
ETH Zurich



Tan Bui-Thanh  
University of Texas



Jonathan Feinberg  
Simula



Serge Prudhomme  
Polytechnique Montréal



Ralf Schulze-Riegert  
Schlumberger



Gunnar Taraldsen  
SINTEF

# Winter School Program

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	
07:30 - 09:00	X	Breakfast					
09:00 - 09:45		Siddhartha Mishra	Ralf Schulze-Riegert	Tan Bui	Serge Prudhomme	Jonathan Feinberg	
09:45 - 10:30							Checkout
10:30 - 11:00		Break					Serge Prudhomme
11:00 - 11:45							
11:45 - 12:30		(Lunch 12:30 - 14:00)					
12:30 - 15:00							
15:00 - 15:45		Tan Bui	Siddhartha Mishra	Jonathan Feinberg	Jonathan Feinberg	X	
15:45 - 16:30							
16:30 - 17:00		Coffee					
17:00 - 17:45	Siddhartha Mishra	Ralf Schulze-Riegert	Tan Bui	Gunnar Taraldsen	Serge Prudhomme		
17:45 - 18:30				Poster			
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)!

# Poster session on Wednesday

- From 17:45 - 18:30 on Wednesday
- Wide range of topics  
See program for list of presenters
- Light refreshments (canapés)

