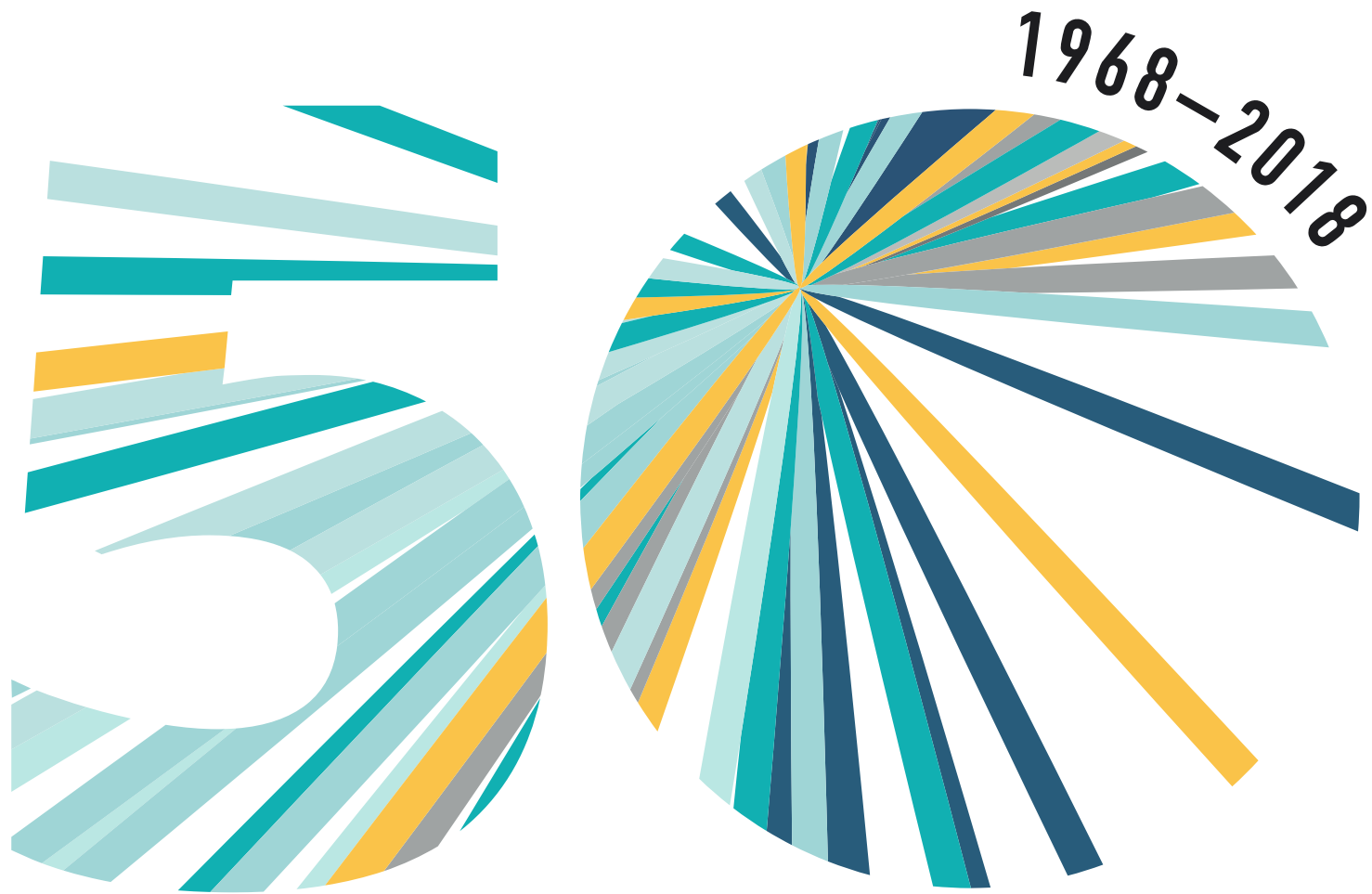


Geoscience research at UiT The Arctic University of Norway – celebrating the 50th anniversary and looking ahead

Prof. Alfred Hanssen, UiT, Director ARCEX
Vice-Dean for Innovation, Faculty of Science and Technology

Joining Forces
Stavanger, 19th April, 2018

ARCEX



UiT / **THE ARCTIC UNIVERSITY
OF NORWAY**



Three pioneers



Olav Holt
Physics
1969 – first professor



Kristian Dysthe
Applied mathematics
1973



Tore Vorren
Marine geology
1973

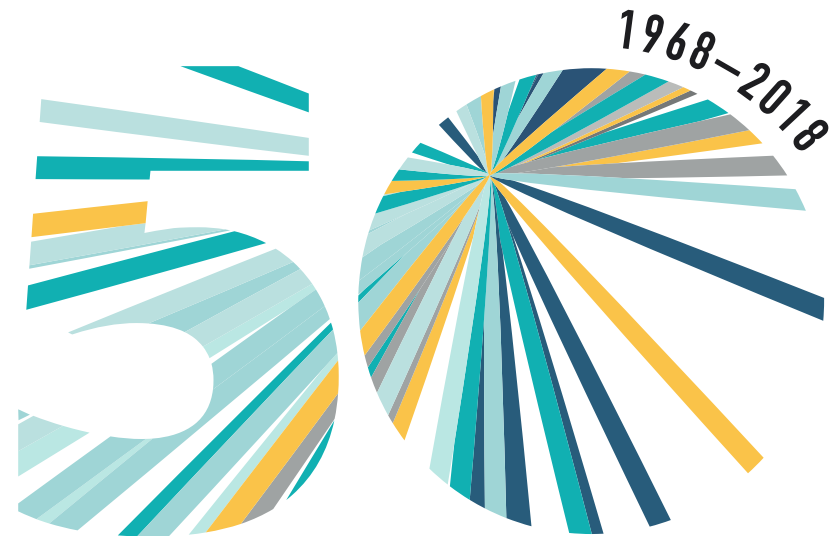


UiT in numbers

- About **16000 students**
- About **3300 employees**

- Main campuses:
 - Narvik
 - Harstad
 - Tromsø
 - Alta

- Also teaching in:
 - Mo i Rana
 - Kirkenes
 - Longyearbyen



UiT / THE ARCTIC UNIVERSITY
OF NORWAY

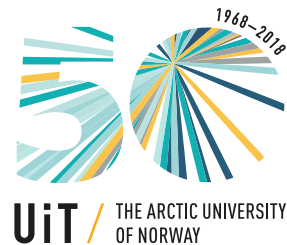
Infrastructure - research vessels



R/V Helmer Hanssen



R/V Kronprins Haakon



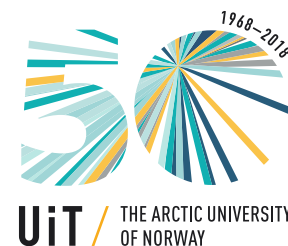
Infrastructure – «Fram» massively parallel Linux cluster

1.1 PetaFlops/s
32192 cores

Most powerful computer
in Norway

202nd most powerful
computer in the world

Free for academic research
and RCN funded projects



UiT
NORGES
ARKTISKE
UNIVERSITET

 Senter for
fremragende
forskning

NATURFAGBYGGET

Institutt for ~~geologi~~ **geovitenskap**

Geologijja instituhtta /
Department of Geology

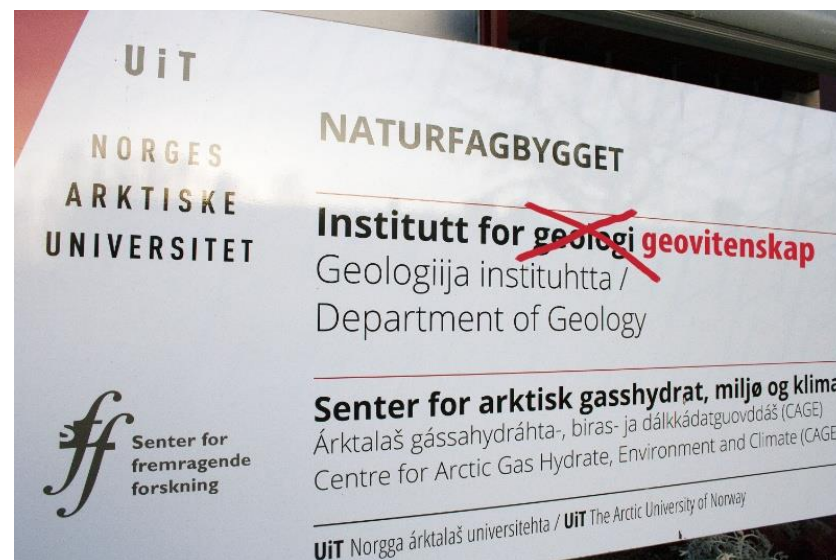
Senter for arktisk gasshydrat, miljø og klima
Árktalaš gássa-hydráhta-, biras- ja dálkkádatguovddáš (CAGE)
Centre for Arctic Gas Hydrate, Environment and Climate (CAGE)

UiT Norgga árktalaš universitehta / UiT The Arctic University of Norway

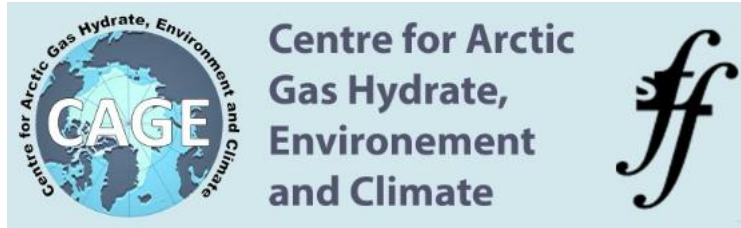


Backbone competences at Dept. of Geosciences, UiT

- Marine geology and geophysics
- Sedimentology and stratigraphy
- Structural geology
- Geophysical methods
- Paleoclimate
- Arctic geology



Our research centres at Dept. of Geoscience



Director: Karin Andreassen
Founding director: Jürgen Mienert



Director: Alfred Hanssen
Founding director: Karin Andreassen



Director: Stian Røberg

Related research at Dept. of Physics and Technology



Director: Torbjørn Eltoft

Two ERC Starting Grants:



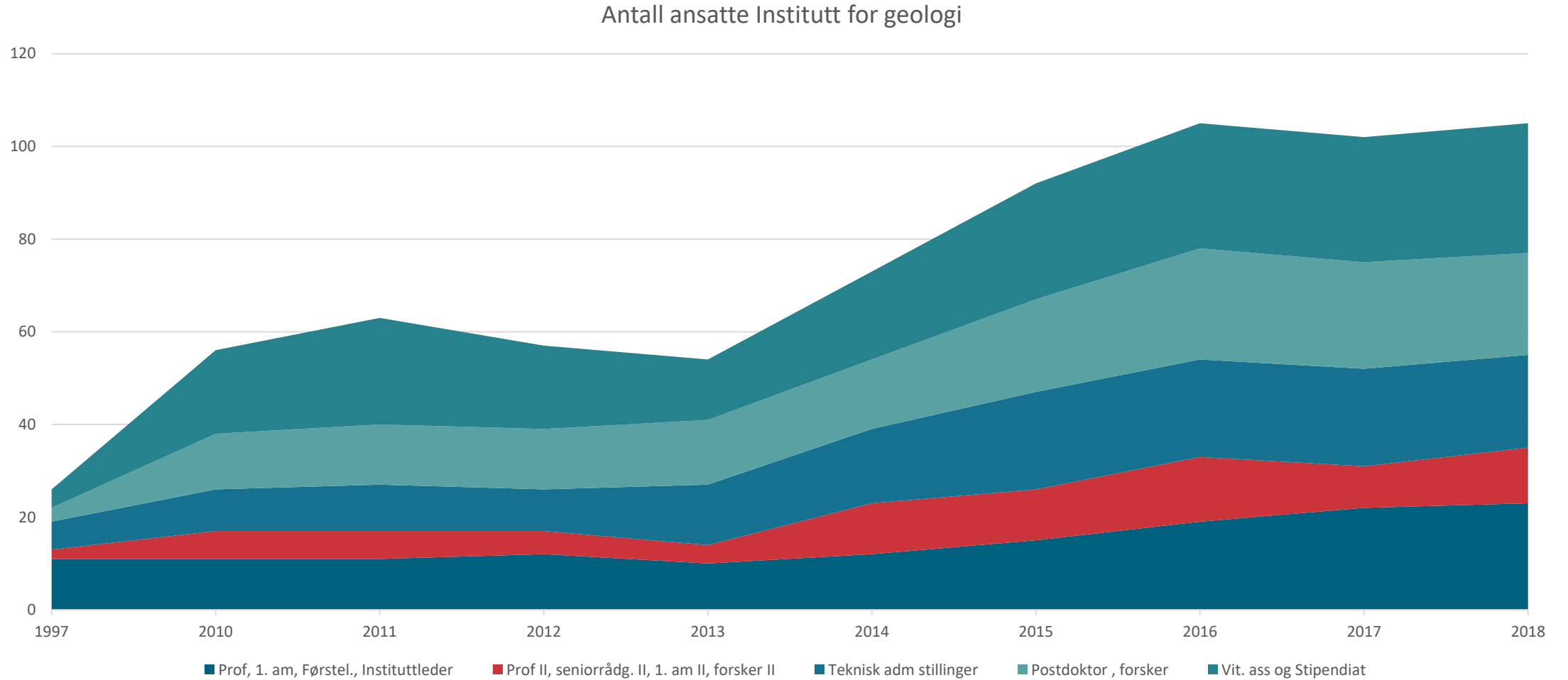
Jana Jagerska



Balpreet Ahluwalia



Number of employees at the Dept. of Geosciences



Laboratories and instrumentation at our department

Main lab - facilities and instruments:

- Thin section lab
- Micropaleontology lab
- Weighing room_
- XRF spectrometer
- X-ray instrument
- MSCL with spectrophotometer
- SEM Tabletop
- Laser Particle Size Analyser
- Leco
- Core Liner Saw
- Freeze drier

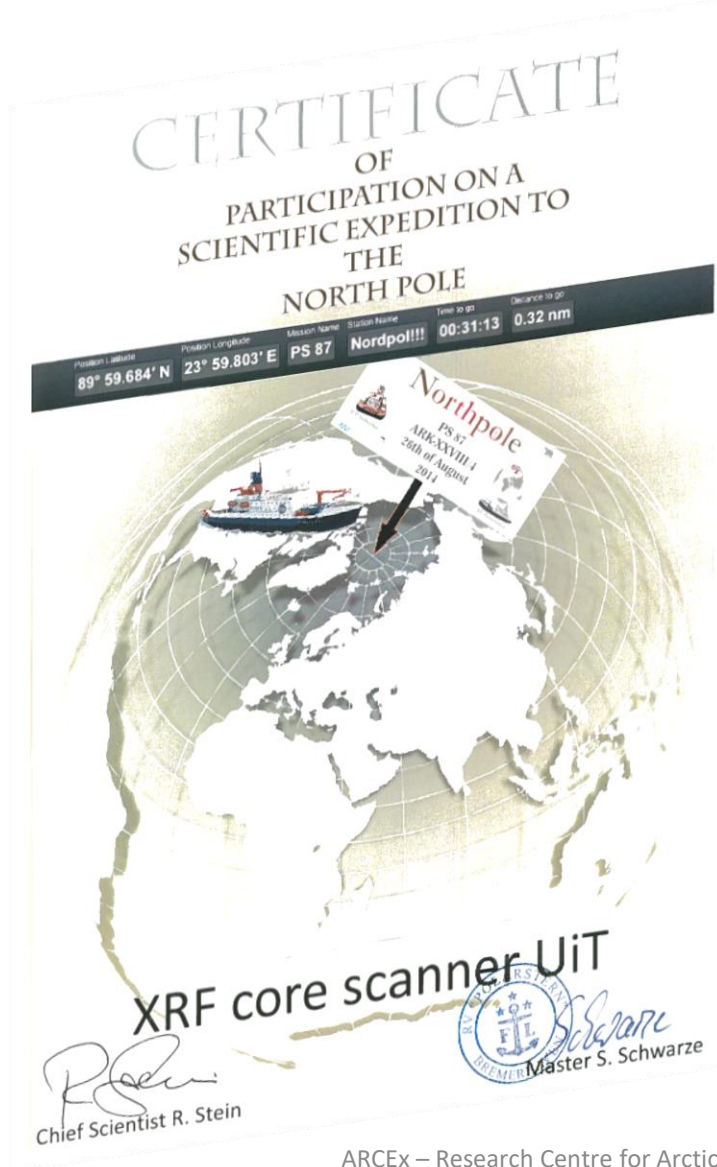
Other labs - facilities and instruments:

- Mass spectrometry lab
- Clean room
- XRF core scanner container lab
- Experimental deformation lab
- High-pressure lab
- Sawing, crushing and milling lab
- Geophysics lab
- Scanning electron microscopy (SEM)

Many labs are equipped through industry contributions

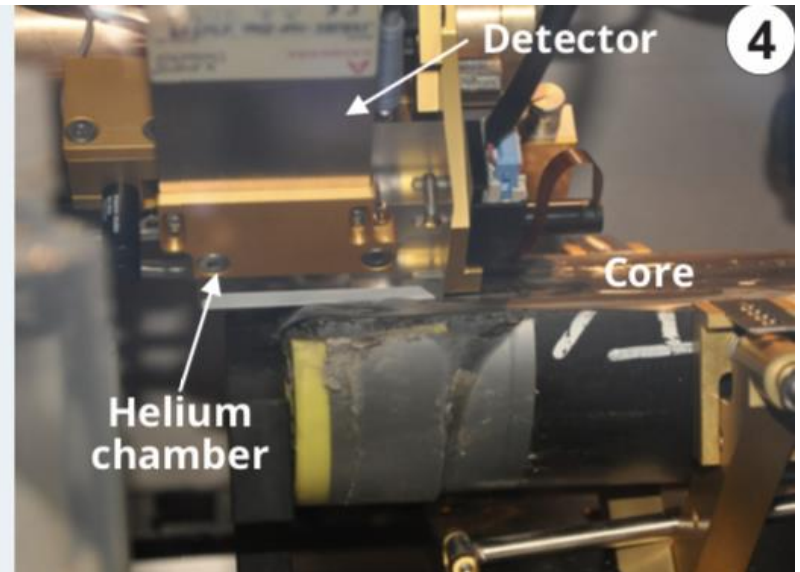
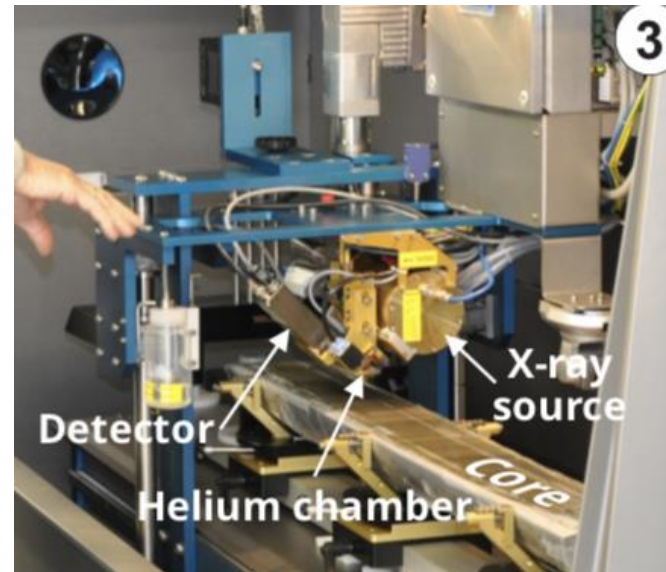


XRF core scanner container lab



Geochemical correlation of Triassic successions in the Barents Sea - testing of a non-destructive method

Sigrun Maret Kvendbø Hegstad¹, Juha Ahokas², Matthias Forwick³, Sten-Andreas Grundvåg⁴







UiT / THE ARCTIC UNIVERSITY OF NORWAY



Management Team

- **WP1: Basin analysis**

Prof. Jan Inge Faleide, UiO



- **WP2: Petroleum systems and play concepts**

Assoc. prof. Kim Senger, UNIS Assoc. prof. S.A. Grundvåg, UiT



- **WP3: Environmental risk management**

Ass. dir. & Prof. JoLynn Carroll, Akvaplan-niva



- **WP4: Technology for eco-safe exploration**

Prof. Tor Arne Johansen, UiB



- **WP5: Education and outreach**

Prof. Jan S. Laberg, UiT Assoc. prof. Jasmine Nahrgang, UiT



- **Adm. coordinator: Ellen I.Hætta, UiT**



- **Director: Prof. Alfred Hanssen, UiT**





Frequent field expeditions – collaboration with industry and authorities



JB Koehl



Research Schools



NFIP
PETROLEUM RESEARCH SCHOOL OF
N O R W A Y

Nasjonal forskerskole i petroleumsfag
Petroleum Research School of Norway



MARG Trainee School in
Arctic Marine Geology & Geophysics



BUBBLES
2017

HOME ABOUT BUBBLES 2017 TOPICS COVERED APPLICATION FORM SCHEDULE LOCATION AND TRANSPORTATION

JUNE 6-16
BUBBLES
2017
TROMSØ, NORWAY



New initiatives

GONORTH
GEOSCIENCES IN THE NORTHERN ARCTIC



Consortium for Arctic Seismic Exploration (CASE)
Prof. Tor Arne Johansen, UiB



OG21

Search 



Foto: Statoil ASA

Norsk

TTA1: Energy efficiency and environment
TTA2: Exploration and increased recovery

TTA3: Drilling, completion and intervention
TTA4: Production, processing and transportation



Forskningsdagene

Skaper begeistring og forståelse for forskning

Troms Finnmark

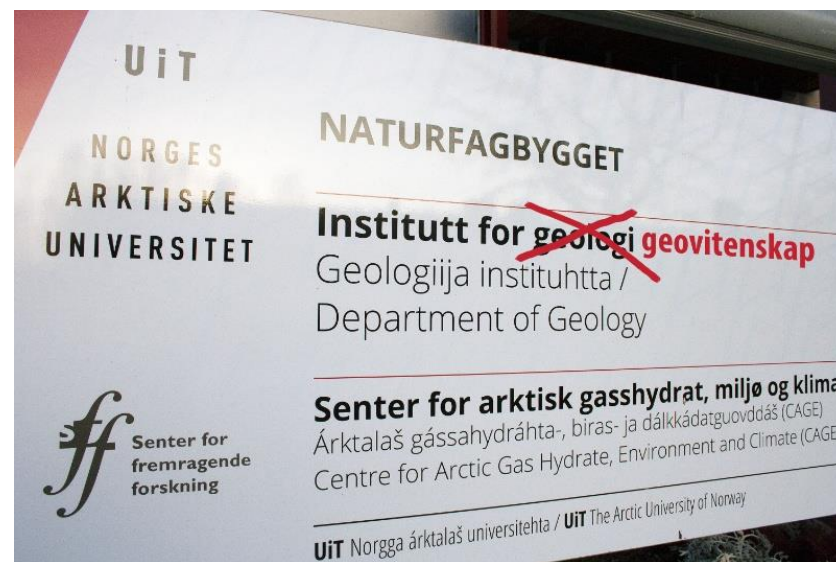


Geologene Ellen Ingeborg Hætta og Mariann Forsberg viste fram hvordan oljereservene i Nordsjøen ser ut.
FOTO: SIMEN FOLLESØ RØISELAND / NRK



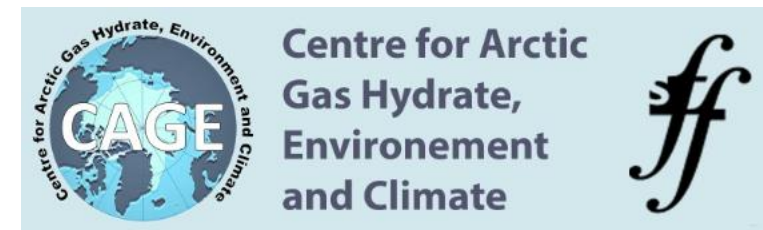
Backbone competences at Dept. of Geosciences, UiT

- Marine geology and geophysics
- Sedimentology and stratigraphy
- Structural geology
- Geophysical methods
- Paleoclimate
- Arctic point of view



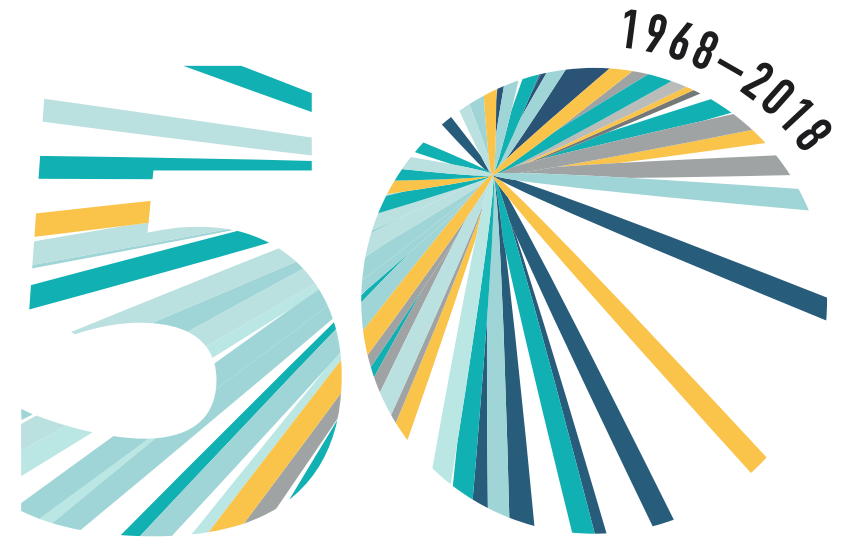
CAGE and ARCEX has brought new competences to the department

- Glaciology
- Oceanography
- Instrumentation technology
- Theoretical geophysics
- Numerical modelling
- Geostatistics
- Digitalisation/pattern recognition/classification/machine learning/big data



The future

- More emphasis on computational geoscience
- More focus on relevance and industry needs
- New SFF (CoE) initiative based on CAGE and ARCEX?
- Interdisciplinary research teams
- Continue national coordination
- Continue Arctic focus



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Minister of Petroleum and Energy, Terje Søviknes seems to be very happy!

