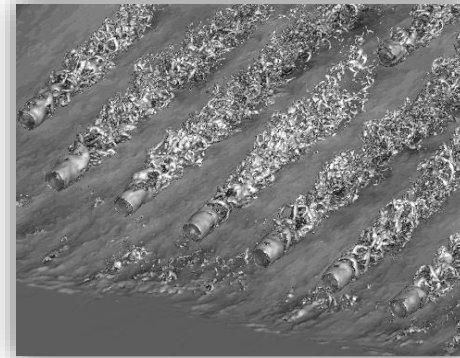
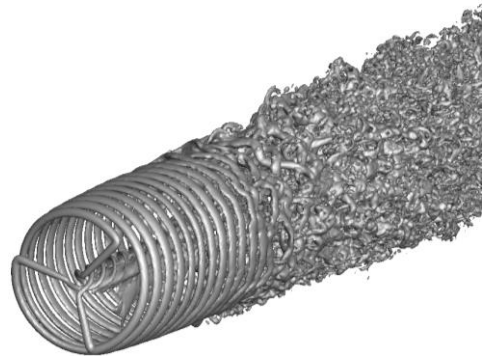




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Larger wind turbines, larger farms, more farms –
higher up in the atmosphere



Professor Stefan Ivanell

Head of Section, Wind Energy Section, Earth Sciences Dept.,
Uppsala University, Campus Gotland

and

Director Swedish Wind Centre



Short about the research group



Challenges we address



Extension of



Outline



Wind Energy Section, Dept. of Earth Sciences



Stefan Ivanell
Professor
Head of Section



Ola Eriksson
Lecturer, PhD
Study
Coordinator



Annie
Nyström
Coordinator



Jens Nørkær
Sørensen
Guest Professor



Johann Köppel
Guest Professor



Heracles Polatidis
Senior Lecturer/
Ass.Prof.



Johanna Liljenfeldt
Senior Lecturer
Program Dir. SET



Simon Davidsson
Kurland
Senior Lecturer
Deputy Program Dir.
SET



Liselotte Aldén
Lecturer
Program Dir. WPPD



Chrstian Lewander
Lecturer
Distance coordinator



Hugo Olivares
Espinosa
Researcher



Henrik Asmuth
Researcher



Warit Chanprasert
Post Doc



Lara-Patricia
Brokmeier
Lecturer



Muhammed Ali
Kuru
Lecturer



Geoffrey Desena
Lecturer

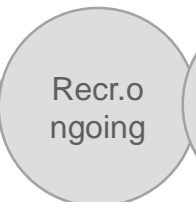
PhD
students



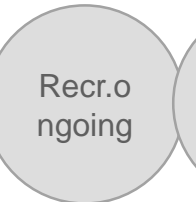
Recr.o
ngoing



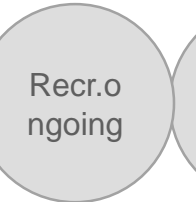
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ngoing



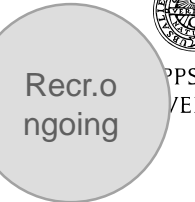
Recr.o
ngoing



Recr.o
ngoing



Recr.o
ngoing



Recr.o
ngoing

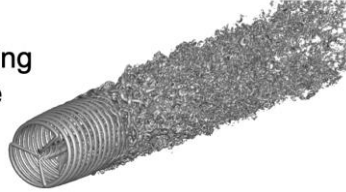


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Research areas:

Wind resources and wakes.

Research in fluid dynamics on modelling and measurements of the atmosphere physics focused on wind energy.



- NextFarm (NFR)
- Forest project (SEA)
- FarmOpt project (SEA) (1 PhD)
- Farm Blockage (SEA)
- Inner Sea conditions (SEA) (1 PhD –CU)
- IEA MexNext (SEA)
- IEA WakeBench/Wind JAM (SEA)
- HIFI Wakes (SEA) (PD)
- Farm Wakes (Durham/UU)
- FLOW (EU HE) (PD)
- AptWind (EU MC-DN) (5 PhD)
- UPW Farm (Vattenfall) (1 PhD)

FLOW

AptWind



Energy Transition

Multidisciplinary research in energy transition, wind energy project development and planning.

- REACT (EU H2020)
- Transport planning, (UN NL) (1 PhD)
- GoSET (UU GRASS)
 - Resources (1 PhD)
 - Planning (1 PhD)
 - Demand (1 PhD)
- Research School Energysystems, NEGAF (SEA)
 - SLU (1 PhD)
 - UU (1 PhD)
 - KTH (1 PhD)
- ELO (EU HE)
- H2 from wind to ferry (SEA with BS)
- RURACTIVE (EU HE)
- INHERIT (EU HE)
- StartSun (Interreg)





Short about the research group



Challenges we address



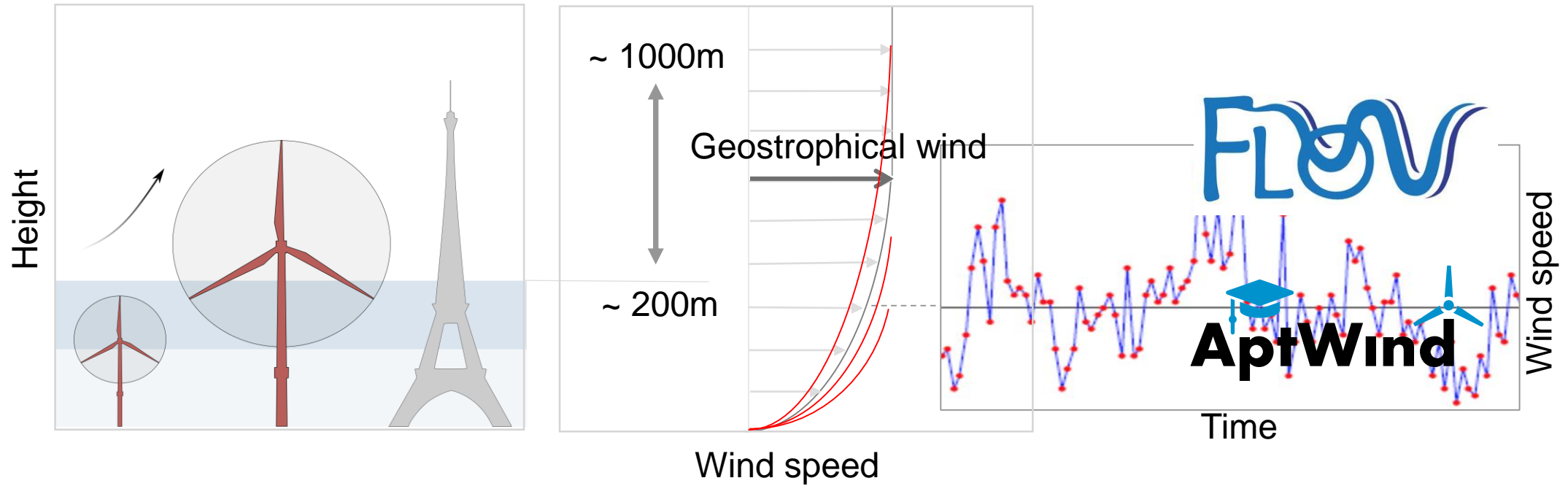
Extension of



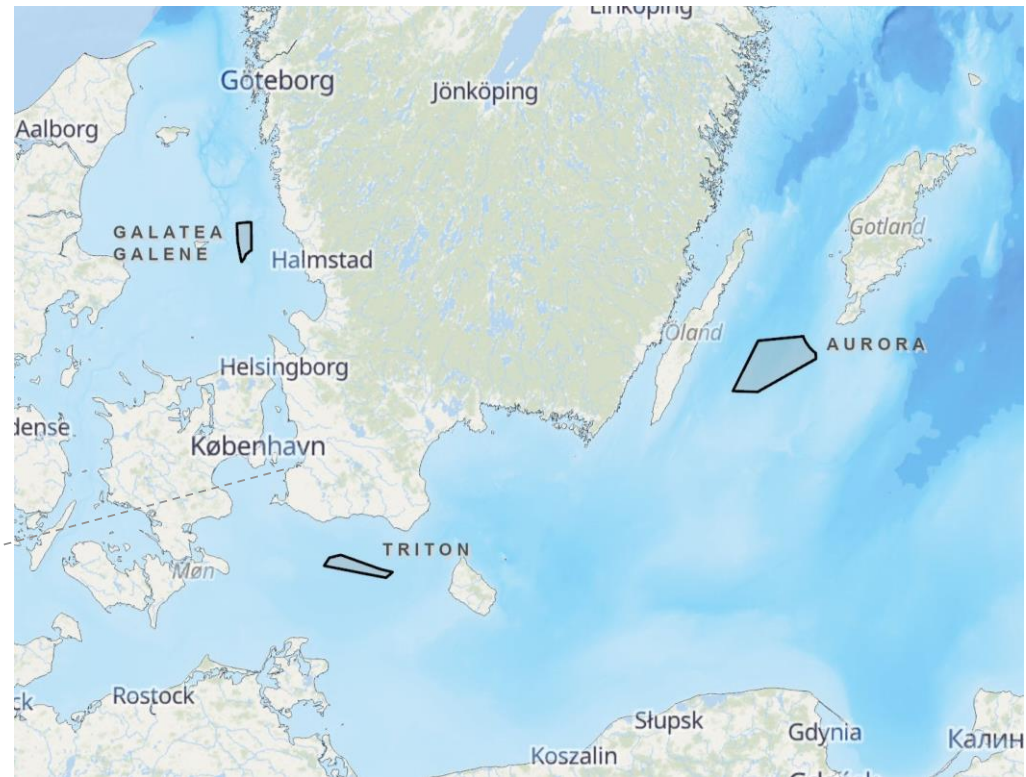
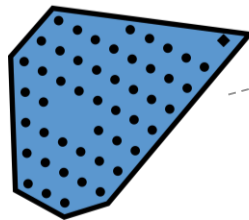
Outline



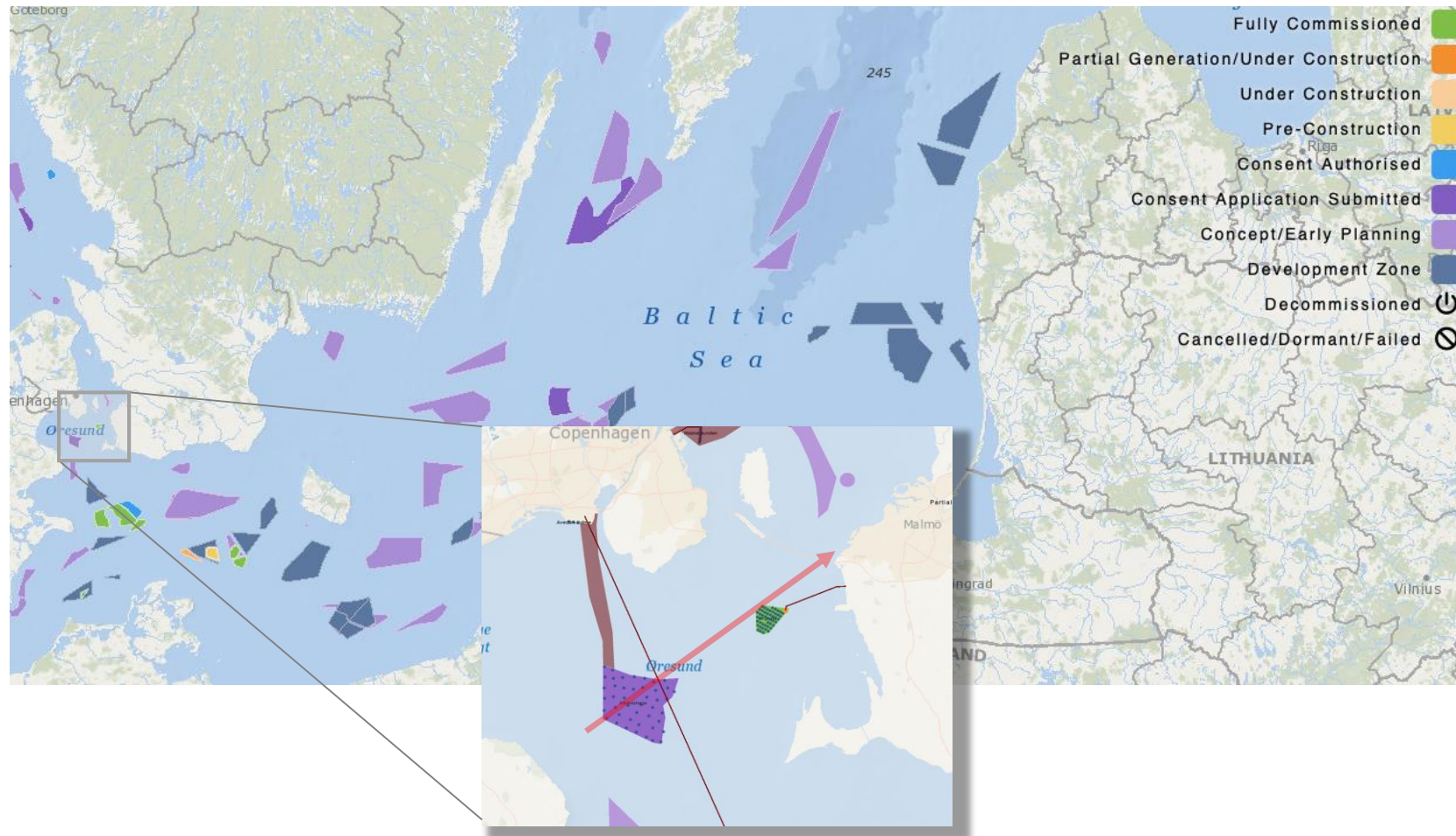
Larger turbines



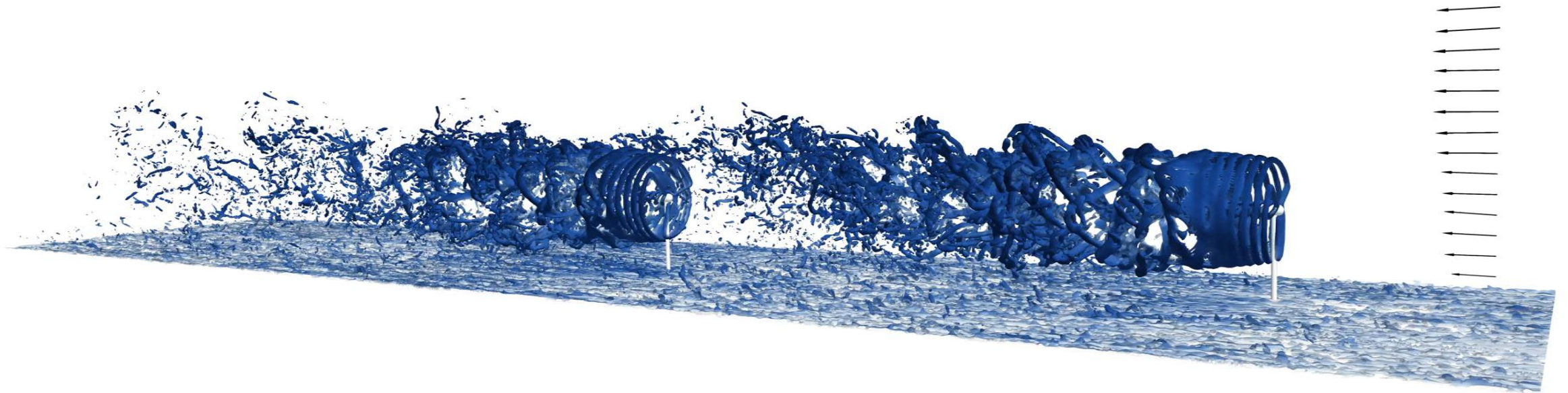
Larger farms



More farms - farminteraction



Novel techniques – Lattice Boltzmann Method





Short about the research group



Challenges we address



Extension of



Outline



STandUP
for
WIND



SWEDISH WIND CENTRE



CHALMERS



LUNDS
UNIVERSITET

LULEÅ
UNIVERSITY
OF TECHNOLOGY

SMHI



UPPSALA
UNIVERSITET

Energiforsk



VÄSTRA
GÖTALANDSREGIONEN



RES



SR Energy
SCANDINAVIAN RENEWABLE

Statkraft



fortum



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Thanks for your attention!



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Dep. of Earth Sciences

Campus Gotland
WIND ENERGY

STandUP
for
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