

NOWITECH final event 22-23 August 2017

Stabilization of Floating Wind Turbines

A Nowitech PhD Thesis

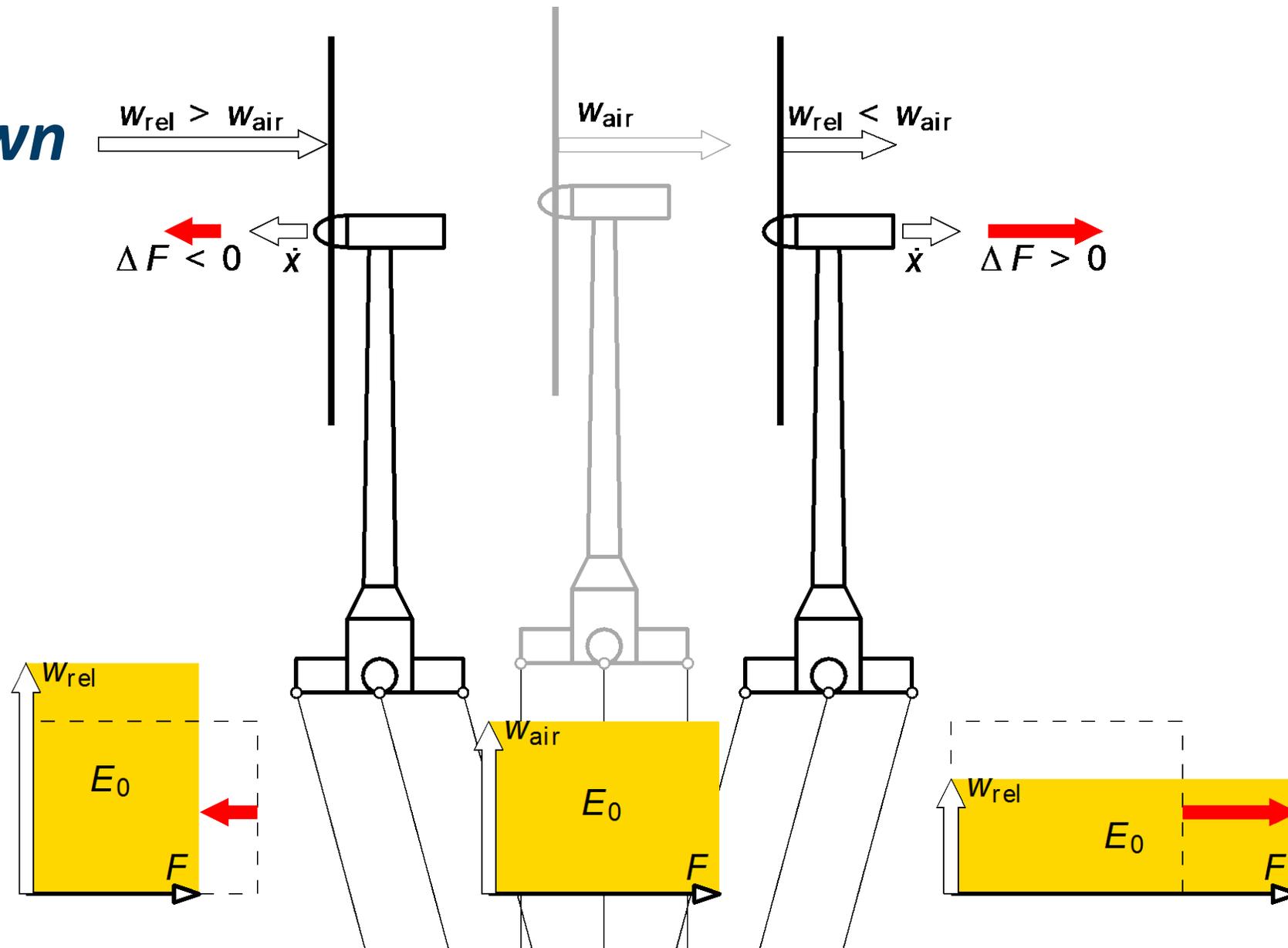
Morten D. Pedersen, Assistant Professor
NTNU, Department of Engineering Cybernetics
morten.d.pedersen@ntnu.no

WHY DO A NOWITECH PHD?

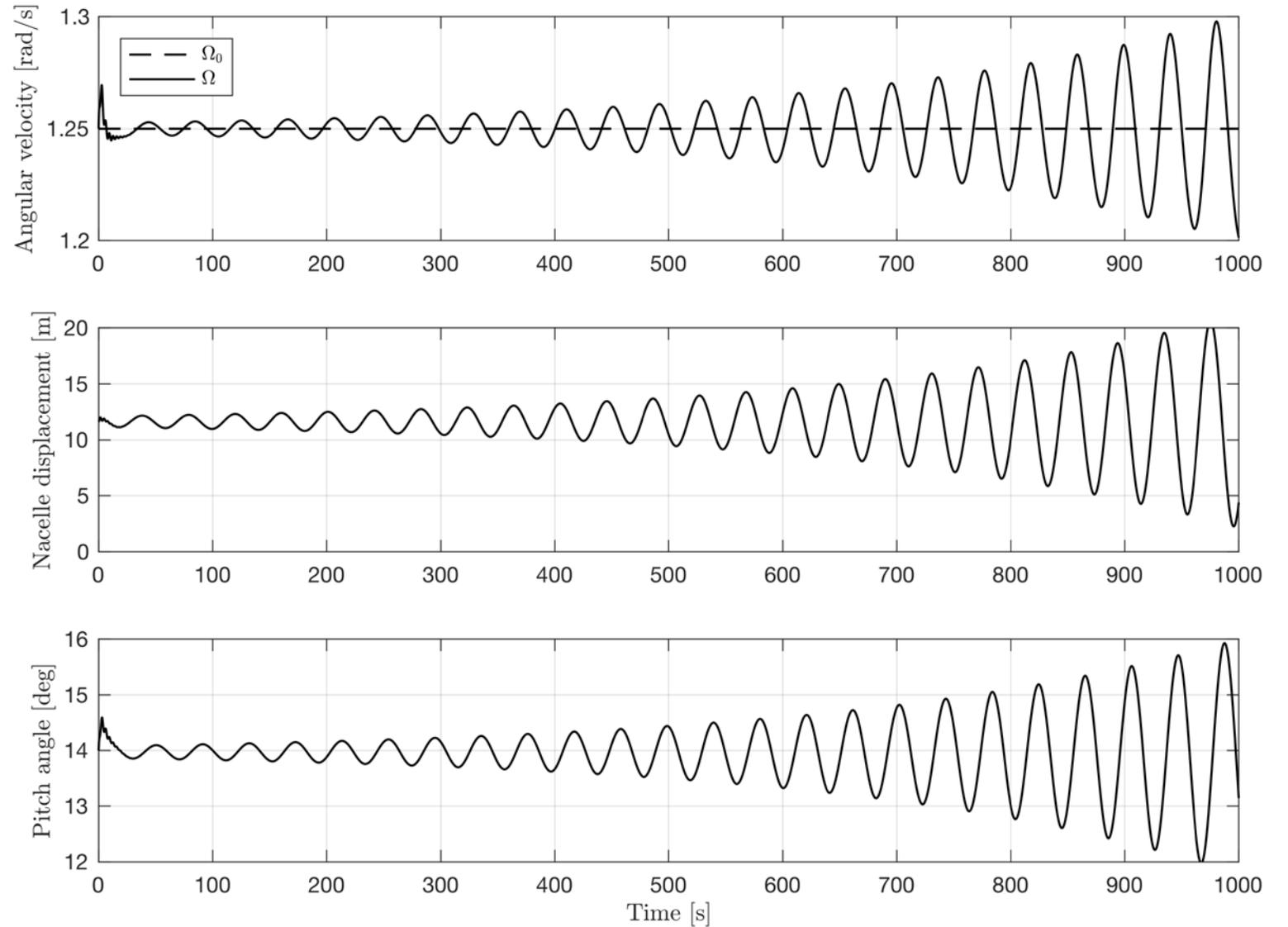
Short answer:
*The pleasure
of finding things out.*



..by pinning down the problem..



*..by pinning down
the problem..*



..digging through obscure journals..

Aus den Nachrichten der K. Gesellschaft der Wissenschaften zu Göttingen.
Mathematisch-physikalische Klasse, 1918, S. 451 bis 477.

Tragflügeltheorie.

I. Mitteilung.

Von

L. Prandtl.

Vorgelegt in der Sitzung vom 26. Juli 1918.

Abgeschlossen am 13. Dezember 1918.

Vorbemerkung. Die Anfänge der im Nachstehenden dargelegten Theorie gehen auf das Jahr 1910 zurück. Die erste Mitteilung darüber erfolgte in einer Vorlesung „Aeromechanik und Luftschiffahrt“ im W.-S. 1910/11. Weitere Mitteilungen sind enthalten in einem Vortrag auf der Versammlung von Vertretern

..first principles reasoning..

$$v = \frac{1}{4\pi} \iiint \frac{\gamma' \times (x - x')}{|x - x'|^3} dx'$$

$$\frac{\partial \gamma}{\partial t} + \frac{\delta \gamma}{\delta x} v_{tr} \approx 0$$

$$F = \delta(t)$$



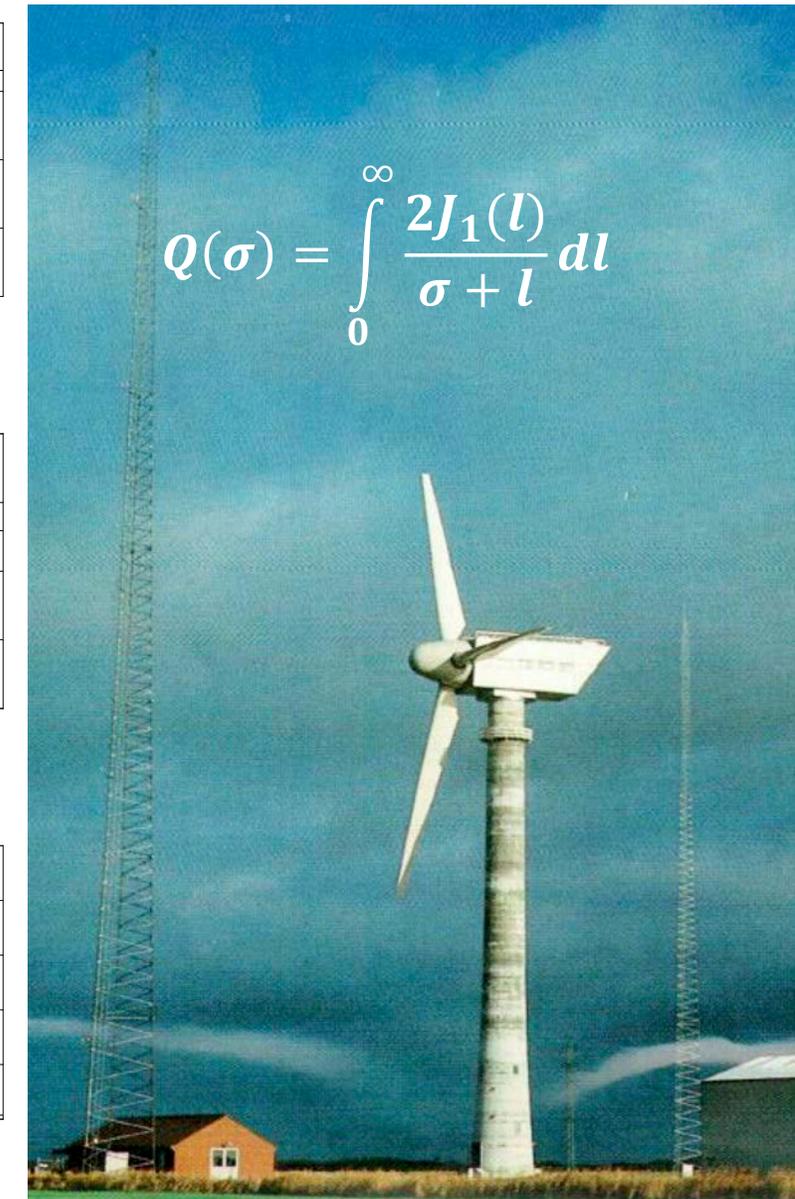
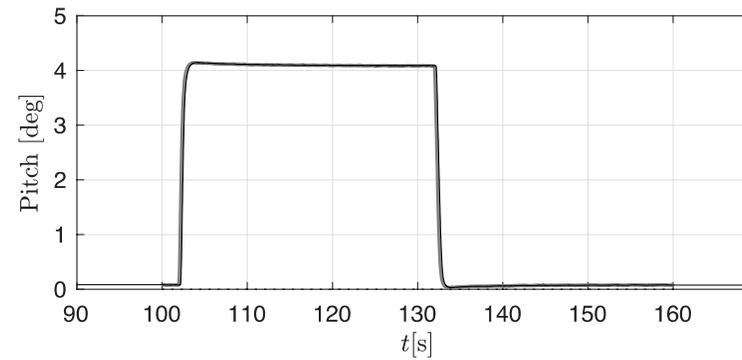
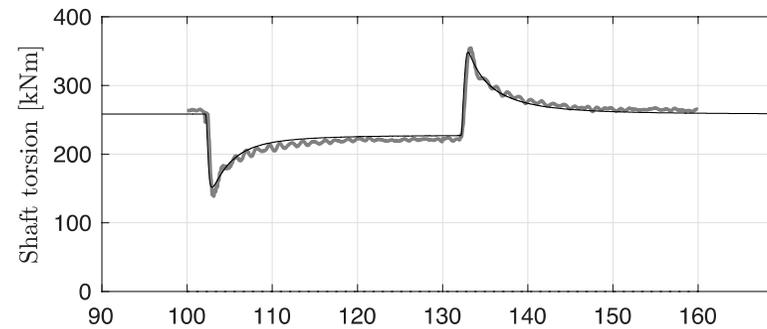
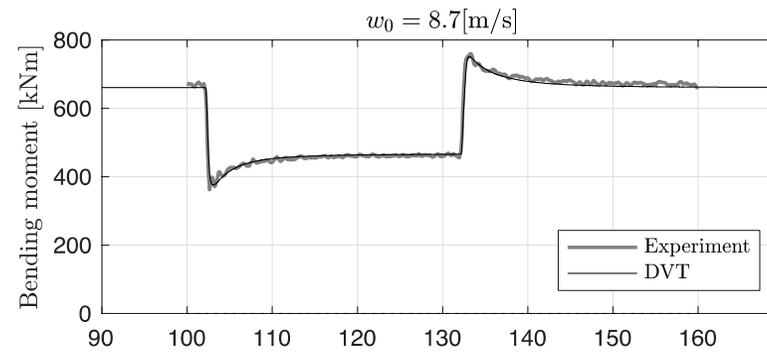
*..undergoing mathematical
"close combat"..*



Thor Inge:
Don't model
yourself to **death**



*..taking small steps
towards a better
answer..*

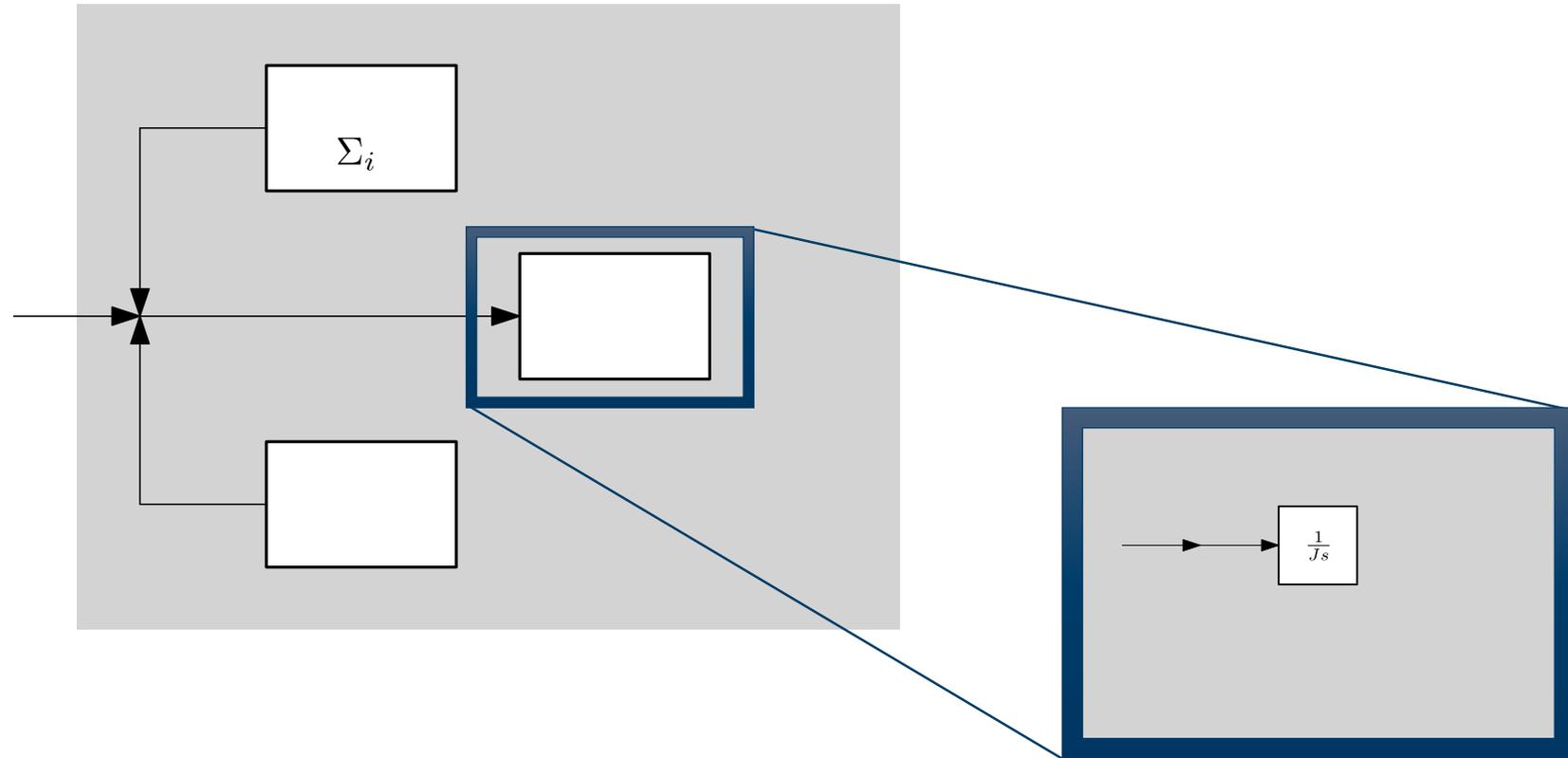


$$Q(\sigma) = \int_0^{\infty} \frac{2J_1(l)}{\sigma + l} dl$$

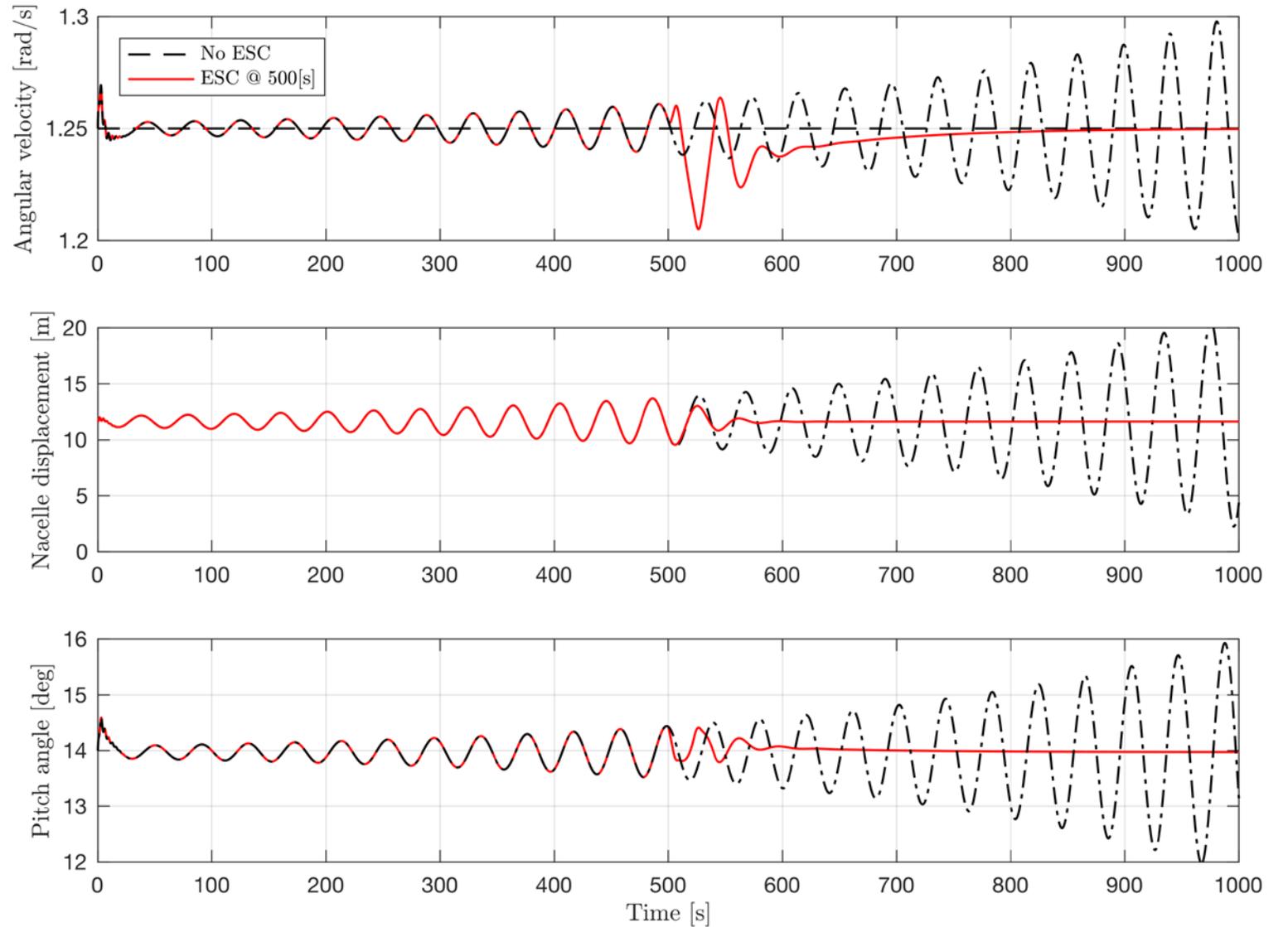
..seeing the light..



..putting the world back in order.

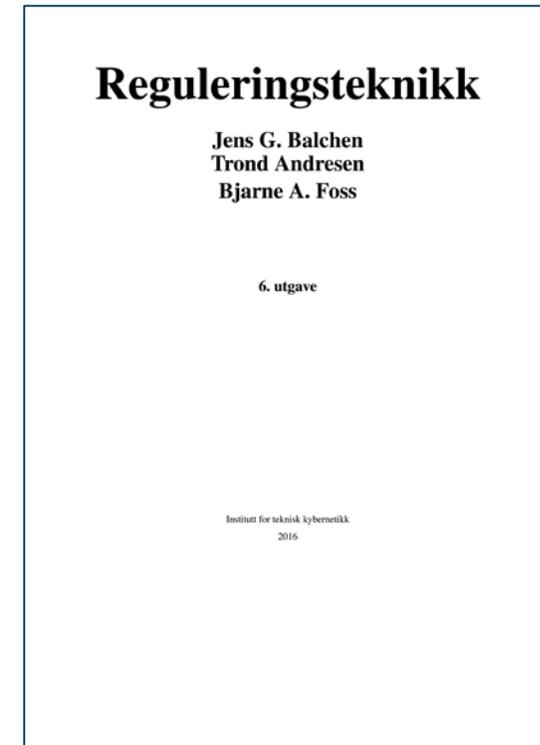
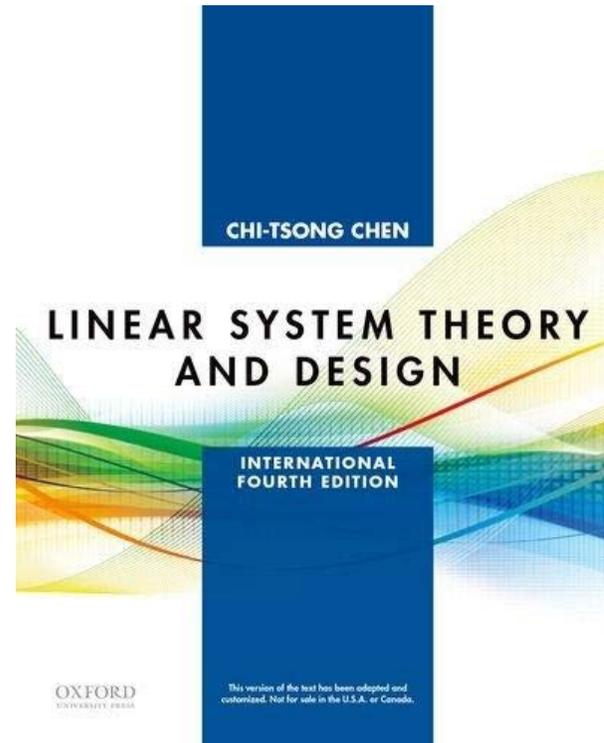
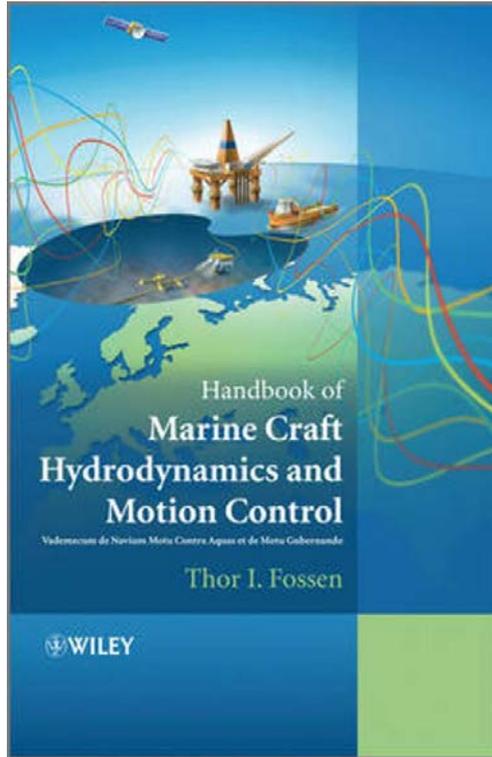


..and solving the problem!



BEST EXPERIENCES?

Teaching



8 semester courses given

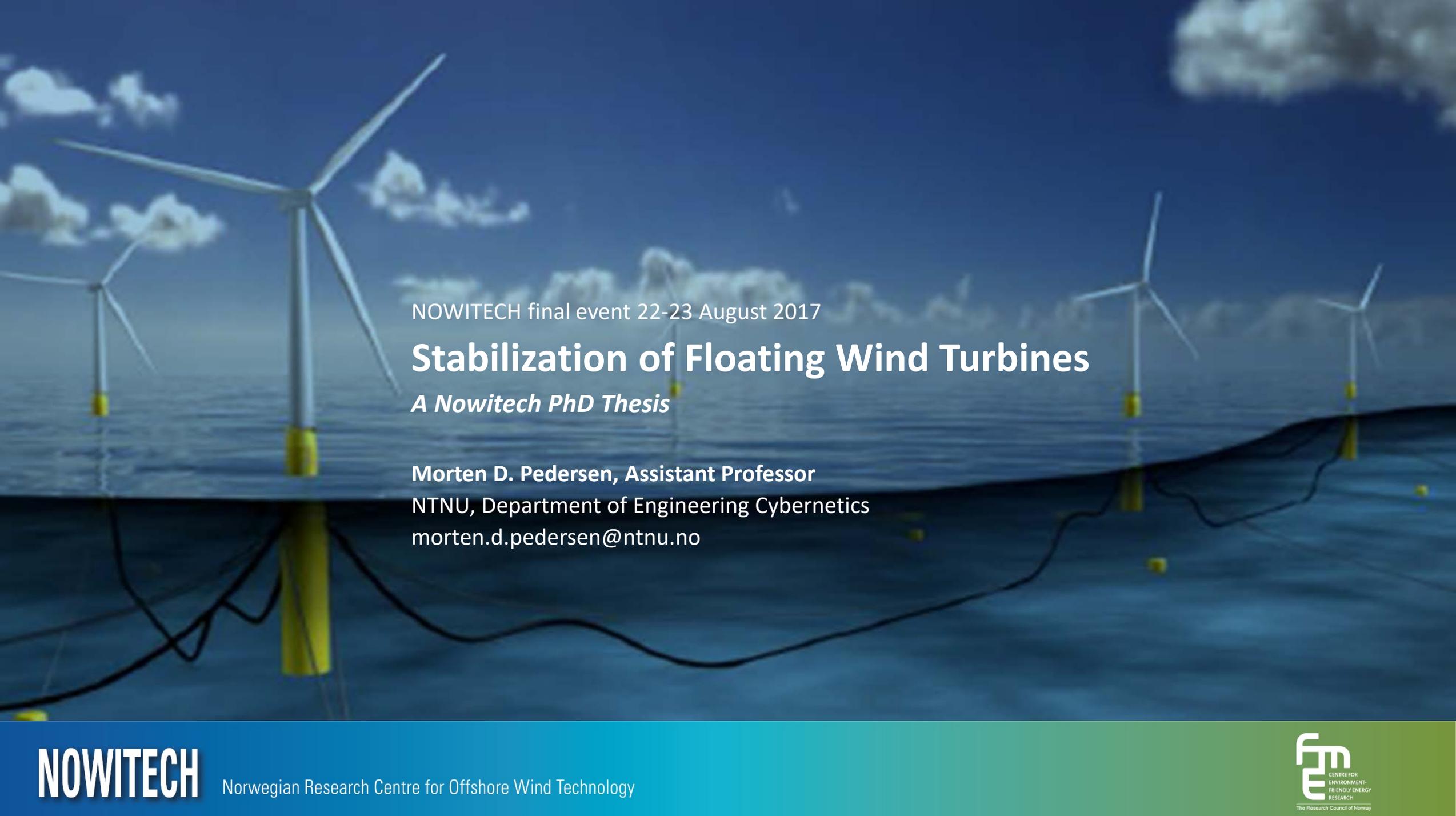
My students

More than 500 grades handed out!



Winning a NOWITECH poster award





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