

# ***KTH Naval Architecture***

## ***Thesis presentations 7-8 June 2021***

### **Session 1 Monday 7 June 9.15-11.45**

#### ***Sails and other fossil free propulsion***

Zoom link: <https://kth-se.zoom.us/j/63004887693>

| <b>Arne Kvarnefalk<br/>&amp; Oskar Robsarve</b>                 | <b>Nicholas<br/>Bouchet</b>  | <b>Suzann Hertzog &amp;<br/>Corentin Paret</b>   | <b>Aron Attila Prusina</b>   | <b>Severi Sarsila</b>   | <b>Lukas Blau</b>  |
|---|--|--|--|---|--|
| <i>Rig Load<br/>Measurements on<br/>Sailing Boat Christiane</i> | <i>Fatigue of a rigid<br/>wing sail designed<br/>for the shipping<br/>industry</i> | <i>Performance and<br/>manoeuvrability analysis<br/>of the wind powered cargo<br/>boat model, wP7M</i> | <i>Design of Electric Pod<br/>Propulsion Concepts for<br/>use in Displacement<br/>Crafts</i> | <i>Comparison of<br/>different wind<br/>propulsion devices on<br/>ships</i> | <i>Towards sustainable<br/>shipping:<br/>Recommendations for<br/>the mast design of a<br/>sailing cargo vessel</i> |

### **Session 2 Monday 7 June 13.15-15.30**

#### ***Seakeeping –models and effects***

Zoom link: <https://kth-se.zoom.us/j/68281019641>

| <b>Adrian<br/>Heijenskjöld &amp;<br/>Per Blomqvist</b>  | <b>Gökhan Osman</b>  | <b>Pawel Jan Beszta-<br/>Borowski</b>                                      | <b>Jonathan Viinikka</b>   | <b>Andrus Kesküla</b>                              |
|---|--|--|--|--|
| <i>Stötar och vibrationer<br/>ombord HSC:<br/>Excitationsmätning<br/>med accelerometrar i<br/>njurhållte?</i> | <i>Computational<br/>Analysis of Spray<br/>Deflector Designs</i> | <i>Motions and<br/>hydrodynamics of a<br/>24m SAR vessel using<br/>CFD</i> | <i>Probabilistic Added<br/>Wave Resistance<br/>Predictions for Design<br/>of RoPax Ferry</i> | <i>Numerical Evaluation<br/>of a Planing Craft</i> |

### **Session 3 Tuesday 8 June 9.15-11.45**

#### ***Autonomous & unconventional marine vehicles***

Zoom link: <https://kth-se.zoom.us/j/69762286399>

| <b>Oscar Onn</b>  | <b>Gustav<br/>Ogesten</b>                | <b>Daniel Workinn</b>  | <b>Adam Olsson</b>                   | <b>Zlatan Ramic &amp;<br/>Teo Rizvanovic</b> | <b>Anders Fox</b>                          |
|---|--|--|--------------------------------------|--|--|
| <i>Application of a Flight<br/>Chip in an Underwater<br/>Quadcopter</i> | <i>Electric hydrofoil<br/>SAR vessel</i> | <i>A high-level interface for<br/>an autonomous sailing<br/>vessel</i> | <i>Aspects on amphibious<br/>UAV</i> | <i>Design of an<br/>amphibious UAV</i>       | <i>Design of wave energy<br/>converter</i> |

### **Session 4 Tuesday 8 June 13.15-15.30**

#### ***Electrification & efficient manufacturing and design***

Zoom link: <https://kth-se.zoom.us/j/65574456820>

| <b>Henrik Lindholm</b>   | <b>Ulrik Sköldkvist</b>  | <b>Sjoerd Sinnema</b>   | <b>Sonja Wadelius</b>   | <b>Varun Goel</b>   |
|--|--|---|---|---|
| <i>Floating Terminal:<br/>Technical Lifetime of<br/>60 Years</i> | <i>Investigation and<br/>implementation of rapid<br/>prototyping in<br/>development of a high-<br/>speed light craft</i> | <i>Introduction of UXV<br/>assets into naval fleet<br/>architectures through an<br/>MILP based naval fleet<br/>modelling tool</i> | <i>Evaluation of<br/>transition towards zero<br/>emission commuter<br/>ferries with a cost<br/>assessment</i> | <i>Environmental<br/>performance of fuel-<br/>based and battery-based<br/>propulsion system on a<br/>short route commuter<br/>ferry</i> |