Development of an integrated Ship and Hybrid Driveline Model for Enhanced Fuel and Energy Consumption Simulation

➢ Supporting companies: **GammaTech Engineering** (GTE) | **WinGD**

- Start date: March 2026
- Project duration: 6÷8 months
- Site:
  - GTE's offices in Turin
- Compensations: Meals, travel expenses
- Motivations and Project Scope
  - In this MSc thesis project, the student will contribute to the update of a ship hybrid driveline model by adding physical systems for more advanced fuel and energy consumption prediction.
  - The focus of the work will be the modelling of a ship body and its interaction with the environment, connecting it to the existing driveline model. The driveline model will be updated by enhancing the electrical circuit model detail
  - The integrated ship model will support WinGD in advancing its fuel and energy consumption simulations improving the driveline dependency on ship maneuvers and external contribution as wind and currents. This will enable the evaluation of advanced ship technologies impact on fuel usage, driving the marine industry toward cleaner and more sustainable solutions