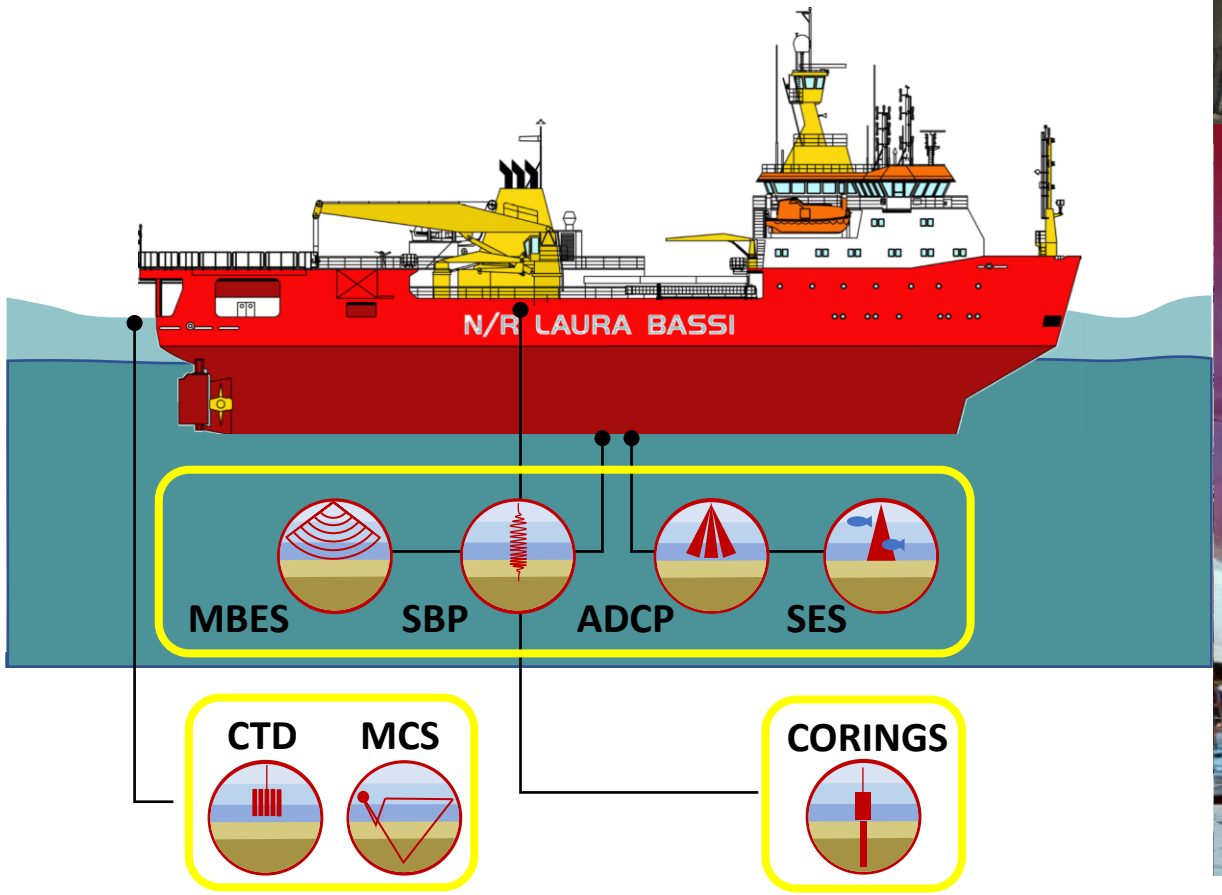
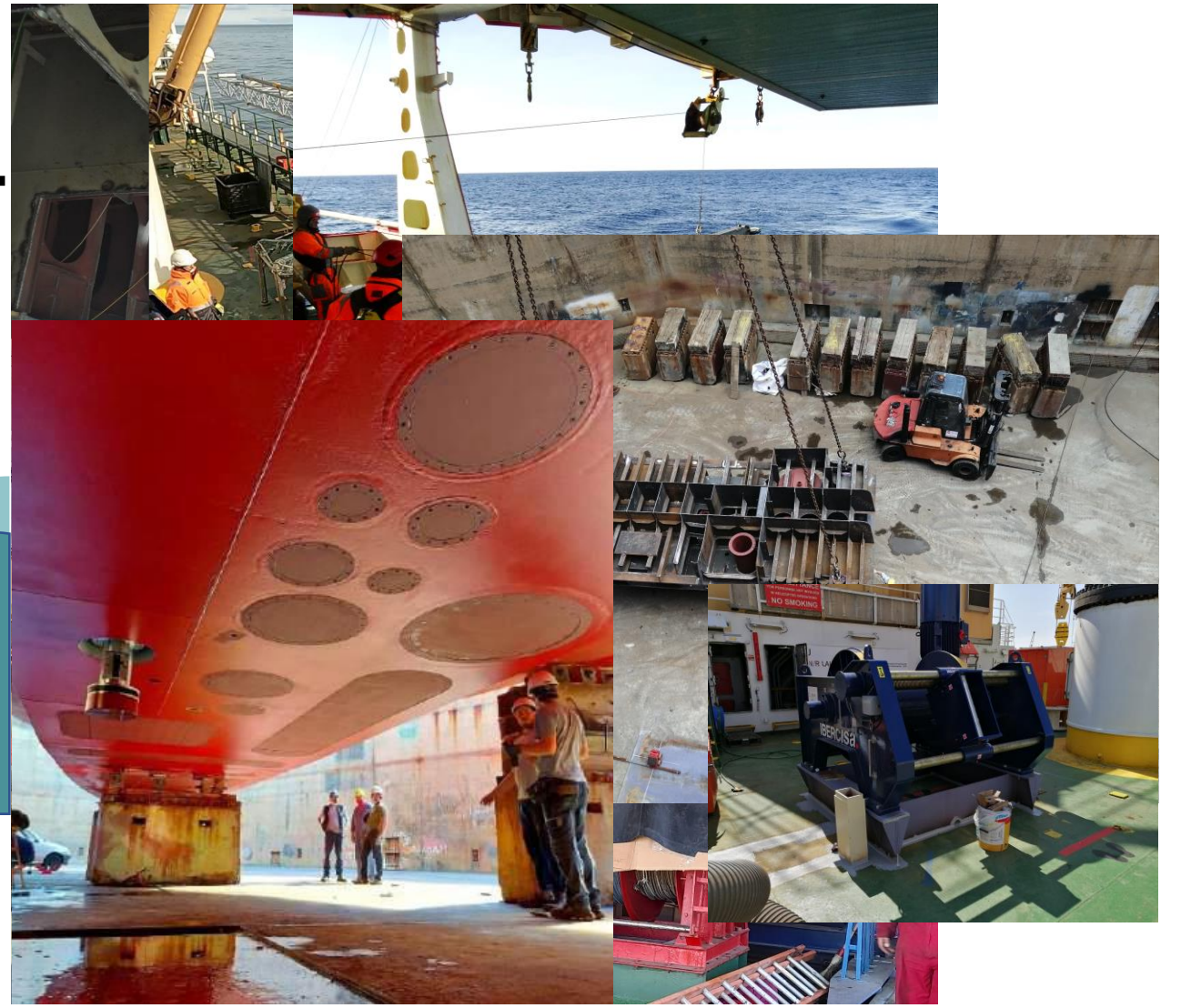
Laura Bassi, one year later: the new systems used in the Polar expeditions and the challanges ahead

Francesco Coslovich, Riccardo Codiglia

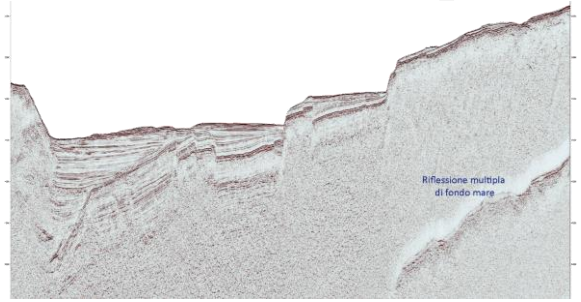
24th ERVO Annual Meeting

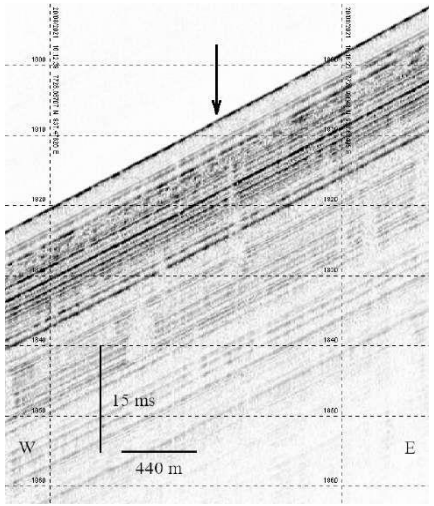
The R/V Laura Bassi
The Refitting of 2021

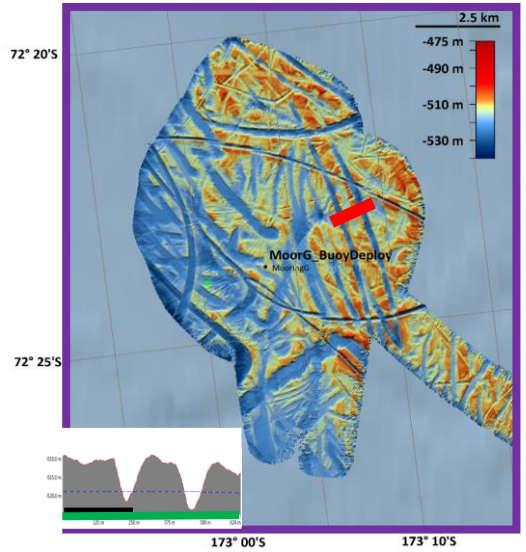




The Polar Expeditions







Improvements needed

- CTD and Carousel deployment:
  - Complicated deployment
  - Data affected by propellers and ship motions

- Coring deployment:
  - Complicated handling of piston corer
  - Usage of crane can be troublesome

Steps Taken

- CTD and Carousel deployment:
  - Complicated deployment
  - Data affected by propellers and ship motions

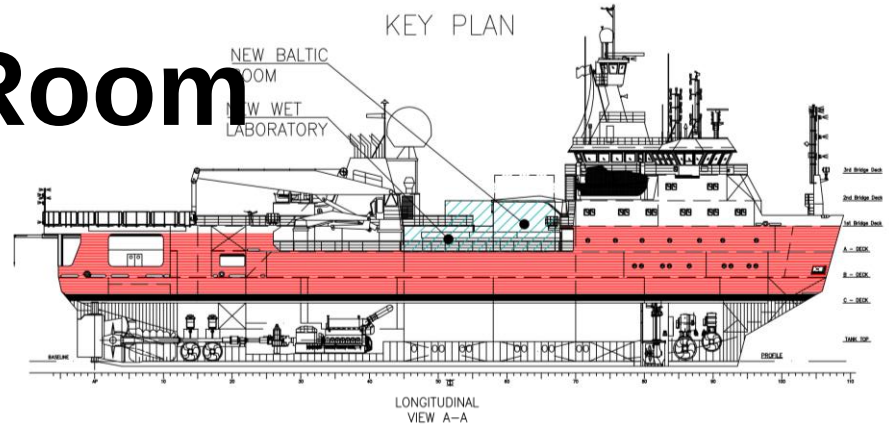
} Baltic Room

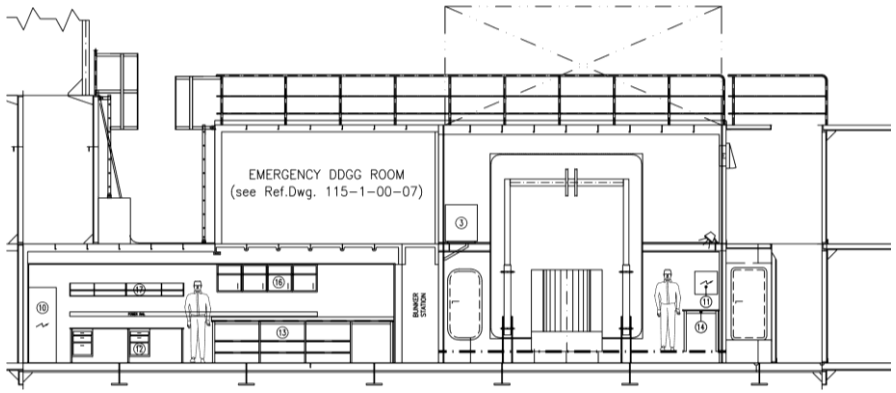
- Coring deployment:
  - Complicated handling of piston corer
  - Usage of crane can be troublesome

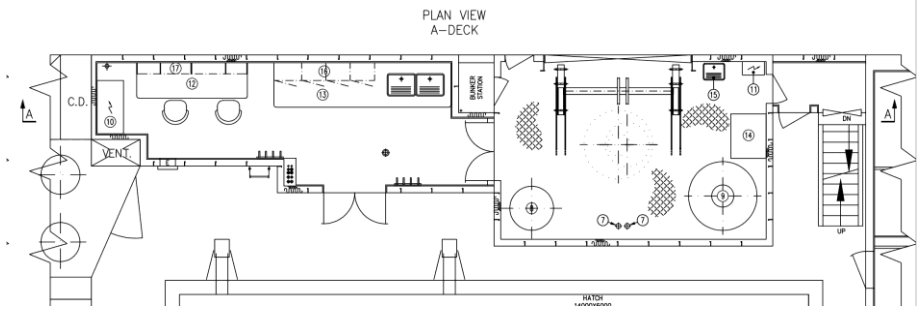
} Frame

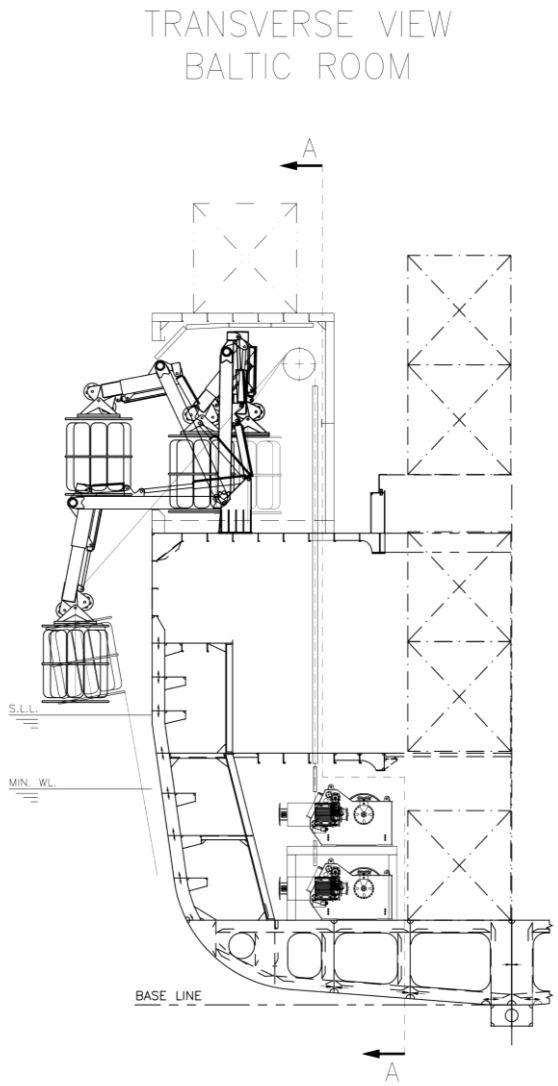
The New Baltic Room

- Goals:
  - Reduce motions
  - Increase distance from propellers
  - Straightforward deployment
- Constraints:
  - Keep load capacity
  - Add a clean rosette



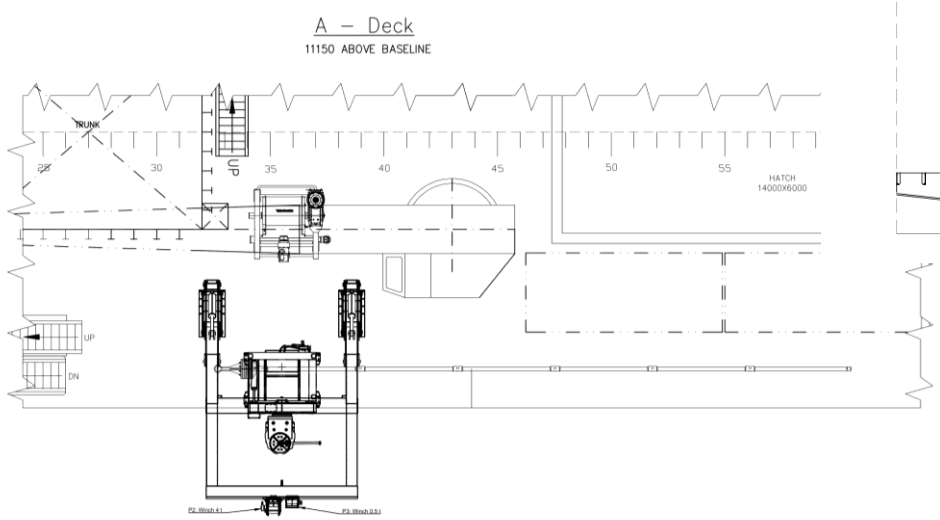


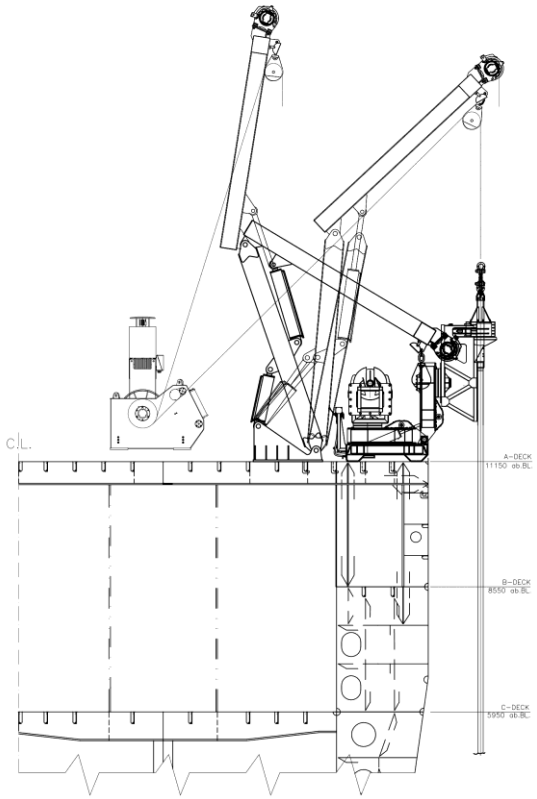




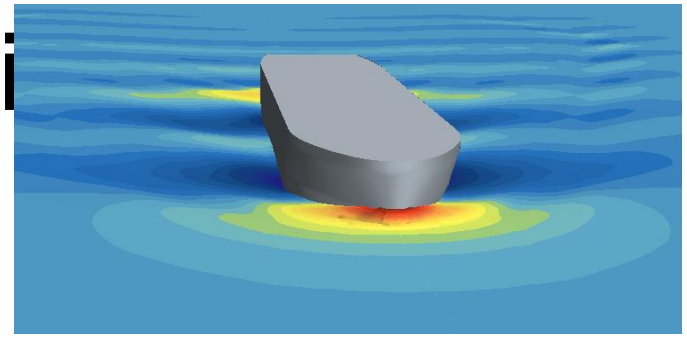
Frame for Coring

- Goals:
  - Lower resting position
  - Improve deployment
- Constrains:
  - Try to keep the crane
  - Allow for deploymet of box-corer and multi-corer

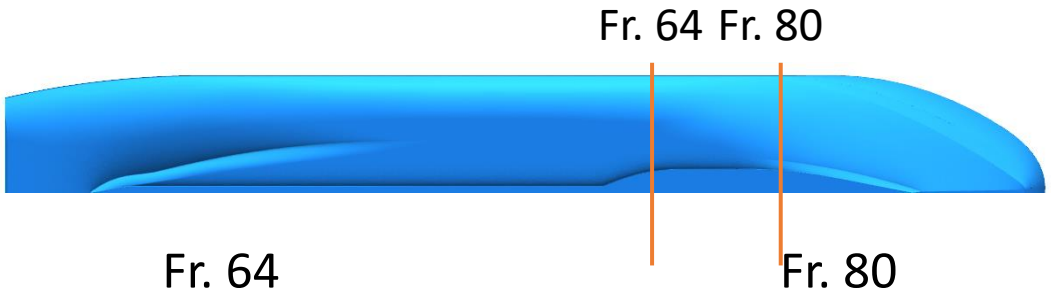


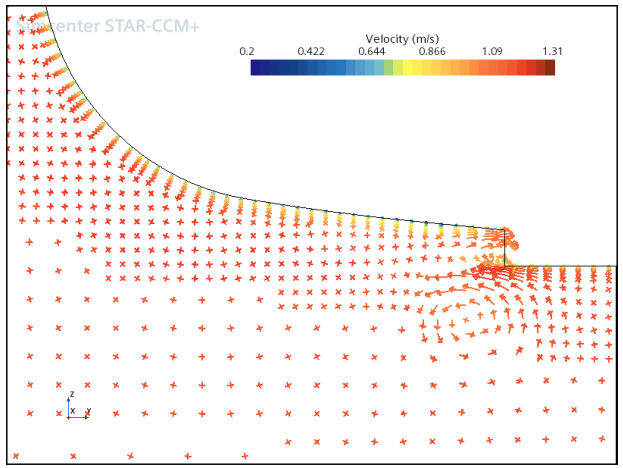


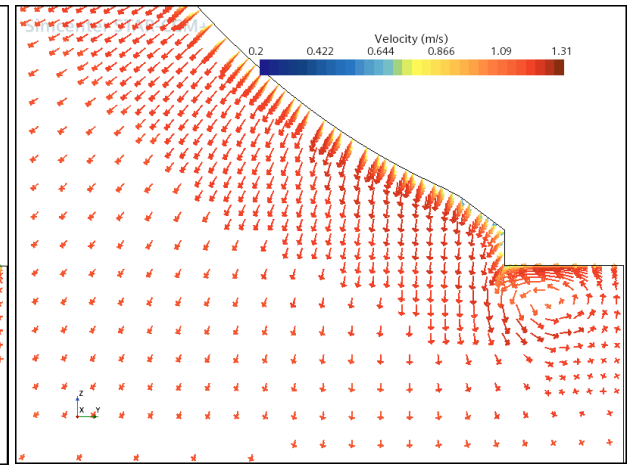
Computational Fluid Dynami



- Cooperation with UniTs
- Validation of the model
- Investigation of local flow on acustic equipment
- Benchmark for Naval Architecture







Thank you!

OGS