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Coupled dynamic analysis of subsea mining riser systems

- Nov. 2016 – Nov. 2018
- Supervisor: Ole J. Nydal (IPT, NTNU)
- Co-Supervisor: Svein Sævik (IMT, NTNU)

Research topics:

- To extend the 1D flow model to include particles and three phase flow with compressible gas (gas-lift scenarios).
- Integration of 1D flow model in SIMA

Industrial goal:

- To contribute towards positioning the Norwegian Maritime industry in the forefront wrt. commercial harvesting of subsea minerals

Scientific questions:

- How will transients related to start-up and operation of mining riser system contribute to riser response?

Innovations:

- A framework for performing dynamic response analysis of long riser systems with internal and external flow

Cooperating company: