

## **Moorings 101 – Intro to Oceanographic Moorings**

This session will be an introduction to the basics of oceanographic moorings. We will have a few long-time mooring professionals on hand to give overviews of their respective areas of expertise, and to answer the many questions that will arise. The intent is for this to be a highly interactive discussion rather than a presentation-heavy session (you will get plenty of PowerPoint in the following few days). So bring your curiosity and questions!

The discussion will cover topics such as:

### Mooring types:

- Subsurface
- Surface

### Mooring elements:

- Buoy types
- Anchors
- Releases
- Backup/recovery buoyancy
- Wire and cable
- Custom and standard hardware – shackles, links, instrument frames, ...
- Materials and corrosion

### Mooring design:

- Weight and buoyancy
- Drag loading
- Wave loading
- Analysis - static and dynamic

### Mooring Operations:

- Ship capability – A-frames, cranes
- Handling gear – winches, tuggers, blocks, deck cleats, ...
- Tiedowns
- Deployment - buoy first, anchor first
- Recovery - bottom first, buoy first

### Mooring Logistics:

- Packing and shipping of mooring
- Loading/offloading ships
- Deck load planning
- Moorings systems integration and test pre/during/after deployment