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Mechanical Ice drilling

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Drillhead configurations and Maintenance in the BEOI's deep ice core drilling project

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Sometimes maybe more on the conservative side then cutting-edge a well-adjusted drillhead is one of the keys to a successful drill-run. Setting up the next drillhead is mainly based on what has proved to be working – or not working - during the last runs, but also on the conditions to be expected next.

This presentation will dive into the different types of cutters and shoes used during the BEOI project as well as drillhead maintenance and ideas for minimizing the pain of maintaining cutters and drillheads. We also will look at the challenges faced when drilling in silty ice and how we tried to cope with these very special conditions.

References

[Wilhelms, F et al. (2014): EPICA Dronning Maud Land EDML ice core drilling protocol](https://doi.pangaea.de/10.1594/PANGAEA.841035)

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