

# SIRIUS

## Centre for Scalable Data Access in the Oil & Gas Domain



Enabling digitalization in and beyond the oil & gas industry through:

- World-class research in formal methods, semantic technology, database integration, scalable computing, data science and industrial digital transformation.
- Research-based tools and methods for digitalization.
- Application to beacon projects in subsurface, operations and engineering.
- Rich collaboration between oil companies, service companies, IT vendors and researchers.
- Laboratories for data sharing and scalable data access.



**SIRIUS**



UiO : **University of Oslo**

**sf** = Centre for  
Research-based  
Innovation  
The Research Council of Norway

# Research for Scalable Data Access

## Analysis of complex systems



## Ontology engineering



## Scalable computing



## Data science



## Semantic integration



## Industrial digital transformation



SIRIUS' research programs focus on the technology components and research based methods that are needed to deliver results through SIRIUS' beacon projects. These technology components and methods are also innovative products of themselves, built on the interdisciplinary application of cutting-edge research.

# Beacons for Industrial Digitalization

**Geological assistant**



**Integrated digital planning**



**Subsurface data access & analytics**



**Digital twins**



**Digital field & reservoir management**



**Digital field development**



**Personalized medicine**



**Environmental applications**



# About SIRIUS

## The SIRIUS Consortium:

Fourteen companies are partners in SIRIUS. They provide cash and in-kind contributions to the centre and its projects. Our partners cover the entire supply chain for the oil & gas industry, from IT vendors and service companies to operators.

## Facts and figures:

- Eight-year project from 2015-2023.
- Financed by the Research Council of Norway, University of Oslo and consortium partners.
- Centre for Research-Based Innovation.
- Organized as part of the Department of Informatics, University of Oslo.
- Around fifty researchers affiliated with the centre.

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UiO : University of Oslo



# SIRIUS

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