

## Geomechanics Initiative Network

- i) Uncertainties in geomechanics
- ii) Rock compressibility

Virtual Meeting  
27<sup>th</sup>-28<sup>th</sup> September 2021

## Welcome



Apologies:



# MS Teams controls

## Keep Muted throughout the meeting

- Please mute yourselves; we may '**mute all**' at times, so please check when you want to speak

## Question Etiquette

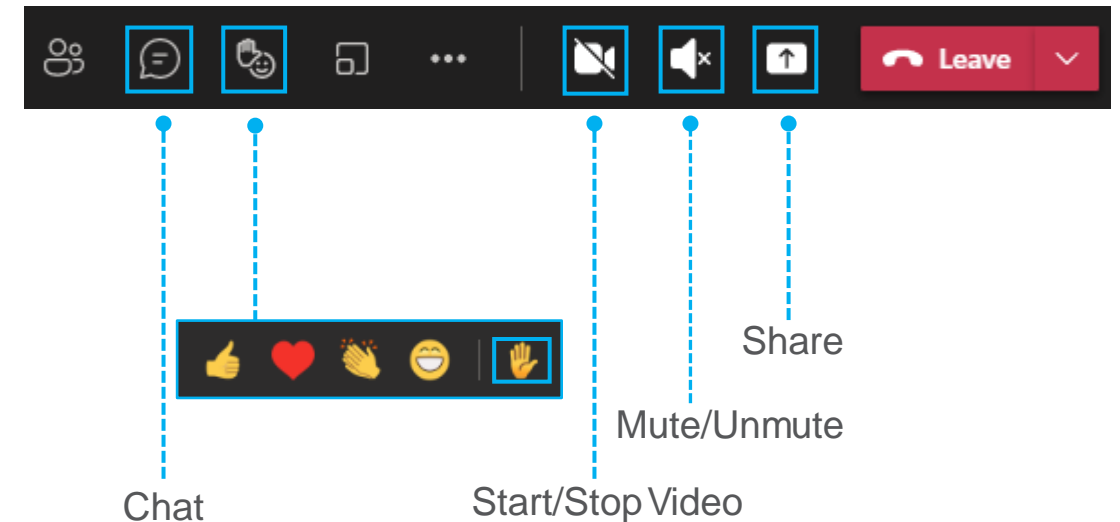
- Relatively informal meeting
- Plan to keep questions until the end, unless you feel it is particularly relevant. Please use the 'raise hand' option to ask a question – we will monitor this and then ask for your question
- When asking your question **please state your name, company and your question**
- Please remember to **re-mute** your microphone (& video) once your question has been answered

## Meeting Chat Box – Informal Chat

- The meeting chat box may also be used for informal discussion throughout the meeting and intervals

## Video

- Please feel free to use your video when speaking i.e. when presenting and for questions. If the meeting struggles due to bandwidth, we may have to ask people to turn their video off.



# Introductions

## A minute to introduce yourself:

- Your name
- Your company
- Your specialism

# Housekeeping

- I will help keep you on time (providing a 5 minute warning)
- Mobiles to silent
- No photos, screenshots or recordings of virtual meeting
  - Presentations will be available from the GIN website after the meeting
- Network website [geomechanics-initiative.com](https://www.geomechanics-initiative.com)
  - Hosts all documents
  - Access for member companies
  - PDF of presentations will be uploaded to the website following the meeting

## GDPR

OTM collects and processes personal information relating to the attendees at this meeting in accordance with the privacy policy which is on the website and in compliance with the General Data Protection Regulation.

[Privacy policy on GIN website](#)

OTM will circulate the contact details (name, company and email address) of each attendee at this meeting to all other attendees following the meeting, as OTM considers that this is in the legitimate interests of the relevant attendees and members of this network.

[We will share your details](#)

However, if you would prefer your details are removed from this distribution list and not circulated in this way, please let me know prior to the end of the meeting.

[If you don't want your details shared – please send Dawn an email before end of meeting](#)

# Agenda – Day 1

<b>Monday 27th September</b>			UK time	EUR time
1	Welcome and objectives for the meeting	Richard Shelton, OTM	09:00	10:00
2	Introductions	All	09:15	10:15
3	FCP assessment including elastic properties uncertainties	Adrien Zerbinati, TotalEnergies	09:30	10:30
4	Uncertainty in pre-drill 1D geomechanical models	Federica Ferrari & Gianfranco Bagnoli, ENI	10:15	11:15
Lunch			11:00	12:00
5	Geomechanical uncertainty in CNOOC	Ben Fletcher, CNOOC	12:00	13:00
6	Estimation of range of fracture size in the wellbore strengthening study	Kun SU, TotalEnergies	12:45	13:45
Break			13:30	14:30
7	Part I: Current state of geomechanical uncertainty assessments at OMV Part II: JIP with Heriot Watt University: An uncertainty quantification for the simulation of reservoir geomechanics and flow using machine learning	Mira Persaud, OMV / Helen Lewis, Dan Arnold, Vasily Demyanov, Heriot Watt	13:45	14:45
End of day 1			14:50	15:50

## Agenda – Day 2

Tuesday 28th September			UK time	EUR time
8	Welcome	OTM, Richard Shelton	09:00	10:00
9	Rock compressibility: from measurement to model	Peter Schutjens, Shell	09:05	10:05
10	Rock Compressibility for reservoir simulation in Aker BP	Tron Golder Kristiansen, Aker BP	09:50	10:50
11	Tbc	Sergio De-Gennaro, Shell	10:35	11.35
Break			11:20	12:20
12	Meeting wrap-up to include discussion on:	OTM, Richard Shelton	11:30	12:30
	- Member update			
	- Future topics			
	- Next meeting format/ timing			
	- AOB			
End of day 2			12:00	13:00



# Presentations

# Day 1 – Close out

## Agenda – Day 2

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End of day 2			12:00	13:00

# Day 2 - Welcome

## Agenda – Day 2

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End of day 2			12:00	13:00

# Day 2 - Presentations

# Day 2 – Close out

Thank you presenters and participants



# Meeting Close out

- **Member update**
- **Future topics**
- **Next meeting format and timing**
- **AOB**

# Meeting Close out

## Member update

- Repsol
- BP
- Other members

# Meeting Close out

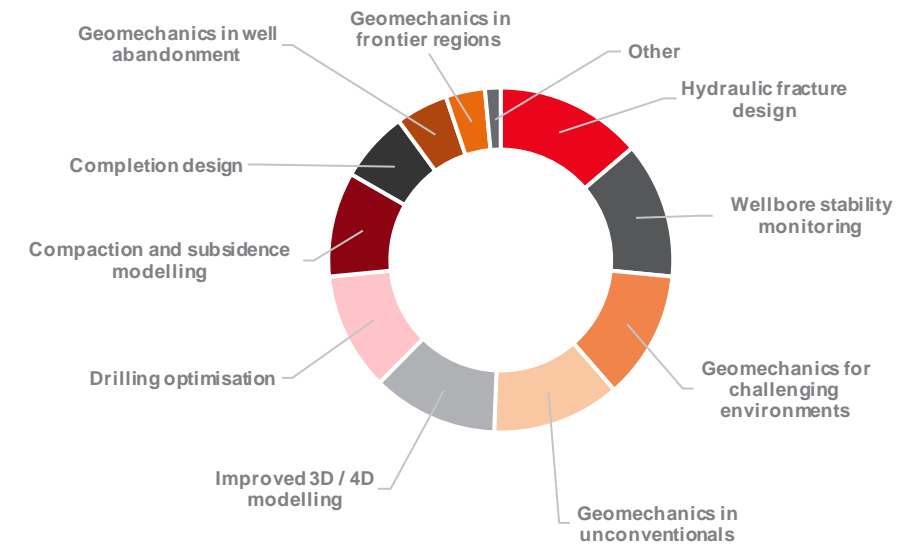
## Future topics

### • Potential topics

- PP/FG/MW analysis
- ~~Fracture analysis~~
- Fault seal analysis
- Aiding/ improving drilling operations
- ~~Drilling in depleted reservoirs~~
- Ultra Deepwater environments
- Thermal / geothermal operations
- Digitalisation / big data
- Technology in Geomechanics (Sergio at September 2019 meeting)
- Rock compressibility (+ fault seal)
- Fault reactivation prediction
- Well completions
- Wellbore strengthening

### • Previous topics

- Challenges in wellbore stability
- Compaction and Subsidence and induced seismicity
- Leak off test / XLOT (Incl for shallow formation)
- HPHT
- Sand prediction
- Injection modelling and monitoring (incl 4D), integrated with fracture analysis



• Theme of next meeting:

• Theme of subsequent meeting:

# Meeting Close out

## Next meeting format/timing

- March/April
- Face-to-face
- Virtual?

# Meeting Close out

**AOB**