

# **ARMA Hydraulic Fracturing Workshop Agenda**

## **8:00 – 8:15 Opening Mark: TCHF Overview**

## **8:15 – 10:15 Session I: Fracture Initiation**

Chair: Hari Viswanathan

Overview of Fracture Initiation

Bob Barree (Barree and Associates): Consideration of Breakdown Conditions of Directional Wells

Esteban Rougier (Sandia National Lab): FDEM analysis of Borehole Fracture Initiation Processes

Robert Gracie (U of Waterloo): Dynamic Fracture and Hydraulic Fracturing

Group Discussions (led by Maurice Dusseault)

## **10:15 – 10:30 Coffee Break**

## **10:30 – 12:30 Session II: Fracture Propagation**

Chair: Xiaowei Weng

Overview of Fracture Propagation

Michael Smith (NSI): Stress Interference Effects (Frac-to-Frac & Stage-to-Stage) – Propagation, Production, and Recovery

Ahmad Ghassemi (Oklahoma University): Impact of fracture interactions, rock anisotropy and heterogeneity on hydraulic fracturing - Some insights from numerical simulations

Jon Olson (UT Austin): Hydraulic fracture complexity: what do we know and where are we going?

Group Discussions (led by Sau-Wai Wong)

## **12:30 – 13:30 Lunch Break**

## **13:30 – 15:30 Session III: Fracture Closure**

Chair: Joe Morris

Overview of Fracture Closure

Dave Cramer (ConocoPhillips): Reexamining DFIT interpretation methods for determining in-situ stress

Joe Morris (Lawrence Livermore): Mechanics of proppant-formation interactions during fracture closure

Alexei Savitski (Shell): Influence of near wellbore tortuosity upon pump-in/flowback test interpretation

Group Discussions (led by Neal Nagel)

## **15:30 – 16:00 Conclusions**

Gang Han