

25th Hubbert Quorum - December 10, 2017

Program

11:00 Brunch

12:45 Carol Wicks & Steve Ingebritsen – Welcome

Chair: Carol Wicks

12:50 **Peter Flemings (U. Texas)** – *Pore pressure regression in the Macondo well and implications for the Deepwater Horizon blowout*

1:20 **Jean Elkhoury (Schlumberger)** – *Dissolving a heterogeneous fracture*

1:40 **Michael Cardiff (U. Wisconsin)** – *What's causing frequency-dependent hydraulic properties in rocks?*

2:00 **Thomas Goebel (UC Santa Cruz)** – *The reach of induced seismicity*

2:20 **Posters:**

Evan Ramos (U. Texas) – *Quantifying amounts and rates of metamorphic decarbonation through carbon and oxygen isotope analyses*

Jacek Scibek (McGill U.) – *The permeability of fault zones in the upper continental crust: Statistical analysis from 460 datasets, updated depth-trends, and permeability contrasts between fault damage zones and protoliths*

Adrien Selles (BRGM) – *Linkages of fracture network geometry and hydro-mechanical properties to spatio-temporal variations of seismicity in Koyuna-Warna Seismic Zone*

Sean Scott (U. Wyoming) – *Fe isotope systematics of hydrothermal waters from the Yellowstone hydrothermal system*

Zhikui Guo (GEOMAR) - *Numerical modeling of hydrothermal circulation at the Longqi-1 Field: Southwest Indian Ridge*

Nate Lindsey (UC Berkeley) – *4-D permafrost thaw observations made using ambient vehicle noise and a very dense distributed fiber optic sensing array*

Udo Weyer (WDA Consultants) – *Dynamics of subsurface flow of fluids of different densities*

Udo Weyer (WDA Consultants) – *Revisiting the groundwater-surface water interaction at the Biscayne aquifer and Bay in Southern Florida*

Barbara Dutrow (LSU) – *Coupled thermal-chemical processes in contact metamorphic aureoles: Constraining the rates and duration with time-dependent 3-D modeling*

Elco Luijendijk (U. Göttingen) – *Quantifying the history of hydrothermal activity using low-temperature thermochronology and numerical models*

2:25 Break

Chair: Barb Dutrow

2:55 **Lars Rüpke (GEOMAR)** – *Solution strategies for fast and accurate simulations of multiphase hydrothermal flow in the system H₂O-NaCl*

3:15 **Brian Konecke (U. Michigan)** – *Sulfur in apatite as a potential volatile and redox tracer in magmatic and magmatic-hydrothermal systems at depth*

3:30 **Yuri Taran (UNAM)** – *Hydrogeology and hydrothermal systems of small volcanic islands*

3:50 **Keiwei Chen (TAMU)** – *The influence of episodic shallow magma degassing on heat and chemical transport in volcanic systems*

4:10 **Break**

Chair: Karen Johannesson

4:40 **Carol Wicks (Louisiana State U.)** – *Bayou Corne sinkhole: Bubbles and troubles*

4:55 **Kehua You (U. Texas)** – *Methane recycling during burial of methane hydrate-bearing sediments*

5:10 **Charlie Harvey (MIT)** – *Why we still don't know the cause of high dissolved arsenic in Bangladesh's aquifers?*

5:30 Adjourn