22nd Hubbert Quorum - December 14, 2014

Program

11:00 Brunch

1:00 **Bekins, Hurwitz, Ingebritsen** – Welcome

1:10 **Jake Lowenstern (USGS)** – *Prodigious degassing of accumulated radiogenic helium*
1:25 **Laura Crossey and Karl Karlstrom (UNM)** – *Continental smokers: Mantle degassing and unique microbiology*
1:45 **Peter Nabelek (U. Missouri)** – *Hydrologic constraints on degassing of metamorphic CO2 during the Neoproterozoic Franklin large igneous event, Arctic Canada*
2:00 **Frédéric Girault (ENS Paris)** – *Large-scale organization of carbon dioxide discharge in the Nepal Himalayas*

2:15 **Posters: Kevin Befus, Christian Dominguez, Grant Ferguson, Stephanie James, Fabien Magri, Atsuko Nomiki, Noah Randolph-Flagg, Kiran Sathaye, Adrien Selles, Yuri Taran, Udo Weyer, Dustin Winslow**

2:25 **Break**

2:55 **Jim Mori (U. Kyoto)** –*Experiment to induce earthquakes with water injection*
3:15 **Tom Holzer (USGS)** – *Emergent springs and streams following the M6.0 South Napa Earthquake, California*
3:35 **Samuel Scott (ETHZ)** –*Supercritical geothermal resources*
3:50 **Nina Kukowski (Friedrich-Schiller-U. Jena)** – *INFLUINS (INtegrated FLuid dynamics IN Sedimentary basins) research initiative*

4:05 **Mark Person** (**Geofluids editor**) – *Presentation of the 2014 Geofluids journal best paper award by an early-career scientist to* **Weon Shik Han (U. Wisconsin-Milwaukee)** *for his paper* "*Characteristics of CO2-driven cold-water geyser, Crystal Geyser in Utah: Experimental observation and mechanism analyses" and to* **Matthew Steele-MacInnes** (**Virginia Tech**) *for excellence in reviewing*

4:10 **Break**

4:40 **Jianwen Yang (U. Windsor)** – *Modelling the formation of unconformity-related uranium deposits in sedimentary basins*
4:55 **Naomi Marks (LLNL)** – *Hydrothermal alteration in the lower gabbros at Hess Deep*
5:10 **Amos Nur (Stanford U.)** – *Revisiting dissolution and precipitation under non-hydrostatic stress*

5:30 Adjourn

Poster presentations

Kevin Befus (U. Texas) - *Calculating the amount of renewable groundwater using age distributions*

Christian Dominguez (UPMC - Sorbonne Universités) – *Joint modelling of canopy interception and soil water flow to compare infiltration rates below land covers (Galápagos Islands)*

Grant Ferguson (U. Saskatchewan) – *Induced seismicity in the northeastern Williston Basin*

Stephanie James (U. Florida) – *Characterization of carbonate hydrostratigraphy using ambient seismic noise: A pilot study in the Floridan Aquifer System, Ocala, FL, USA*

Fabien Magri (GFZ-Potsdam) – *Comparative simulations of 2D and 3D mixed convection flow in a faulted basin: An example from the Yarmouk Valley, Israel and Jordan*

Atsuko Nomiki (UC-Berkeley) – *El Cobreloa: A geyser with two distinct eruption styles*

Noah Randolph-Flagg (UC-Berkeley) – *Two-phase convection in a cooling ignimbrite*

Kiran Sathaye (U. Texas) -- *Noble gas partitioning in Bravo Dome natural magmatic CO2 field*

Adrien Selles (UPMC - Sorbonne Universités) – *Temperature as tracer of the groundwater circulation within a complex volcano-detritic system*

Yuri Taran (UNAM) – *Geochemistry and solute fluxes of volcano-hydrothermal systems of Shiashkotan, Kuril Islands*

Udo Weyer (WDA Consultants) *–1) Regional groundwater dynamics as a cause for the genesis of the Pine Point MVT lead/zinc ore deposits; 2) Impact of Groundwater Dynamics on the Genesis of the Athabasca Oil Sands: a novel approach*

Dustin Winslow (UC-Santa Cruz) – *Sustainability and flow control in three-dimensional outcrop-to-outcrop hydrothermal circulation*

Attendees

Daria Akhbari - U. of Texas-Austin
Jessica Ball - USGS / Menlo Park
Andrew Barbour - USGS / Menlo Park
Kevin Befus - U. of Texas-Austin
Barbara Bekins - USGS / Menlo Park
Steve Breen - UC-Berkeley
Svetlana Byrdina - Université Savoie
Yanying Chen - U. of Missouri
Giovanni Chiodini - INGV (Italy)
Bruce Christenson - GNS (New Zealand)
Laura Clor - USGS / Menlo Park

Armanco Coco - U. of Bristol
Jackson Crews - Desert Research Institute
Laura Crossey - U. of New Mexico
Jeff Cullen - U. of Texas-Austin
Kristopher Darnell - U. of Texas-Austin
Marco De Lucia - GFZ – Potsdam
Christian Dominguez - UPMC - Sorbonne Universités
Thomas Driesner - ETH-Zurich
Kristen Fauria - UC-Berkeley
Tomáš Fischer - Charles U. (Czech Republic)
Andy Fisher - UC-Santa Cruz
Kirsten Fristad - NASA Ames Research Center
Shemin Ge - U. of Colorado
Frédéric Girault - IPG de Paris
Pierre Glynn - USGS / Reston
Weon Shik Han - U. of Wisconsin-Milwaukee
Tom Hanks - USGS / Menlo Park
Brioch Hemmings - U. of Bristol
Mark Hesse - U. of Texas-Austin
Ferdinand Hingerl - Stanford U.
Paul Hsieh - USGS / Menlo Park
Tom Holzer - USGS / Menlo Park
Katie Huffman - Penn State
Shaul Hurwitz - USGS / Menlo Park
Steve Ingebritsen - USGS / Menlo Park
Stephanie James - U. of Florida
Xiao-Wei Jiang - China U. of Geosciences (Beijing)
Jake Jordan - U. of Texas-Austin
Karl Karlstrom - U. of New Mexico
Lenny Konikow - USGS / Reston
Daniel Krysak - U. of Buffalo
Nina Kukowski - Friedrich-Schiller-Universität Jena
Rachel Lauer - UC-Santa Cruz
Jake Lowenstern - USGS / Menlo Park
Fabien Magri - GFZ – Potsdam
Naomi Marks - LLNL
Andrew McCaig - U. of Leeds
Colin McNeece - U. of Texas-Austin
Jean Moran - CSU – East Bay
Jim Mori - U. of Kyoto
Peter Nabelek - U. of Missouri
Atsuko Namiki - U. of Tokyo
Amos Nur - Stanford U.
Mark Person - New Mexico Tech
Noah Randolph-Flagg - UC-Berkeley
Mark Reid - USGS / Menlo Park
Andrew Renshaw - CSU – East Bay
Antonio Pio Rinaldi - Lawrence Berkeley Lab
Martin Saar - U. of Minnesota
Pablo Sanchez - U. de Chile
Kiran Sathaye - U. of Texas-Austin
Samuel Scott - ETH-Zurich
Liz Screaton - U. of Florida
Daniel Segal - LLNL/Chevron

Adrien Selles - UPMC - Sorbonne Universités
Rob Sohn - WHOI
Andri Stefansson - U. of Iceland
Yuri Taran - UNAM (Mexico)
Josh Taron - USGS/Menlo Park
Luca Urpi - U. of Utrecht
Jean Vandemeulebrouck - Université Savoie
Cliff Voss - USGS/Menlo Park
Herb Wang - U. Wisconsin
Matt Weingarten - U. Colorado
Philipp Weis - ETH-Zurich
Udo Weyer - WDA Consultants (Calgary)
Dustin Winslow - UC-Santa Cruz
Lorraine Wolf - Auburn U.
Jianwen Yang – U. Windsor