

# 2016 GL/DTM Poster Gathering

May 18, 3pm-6pm, Greenwalt Building, BBR campus

## Theme: ASTRO

Presenters	Title	Poster #
Alan Boss	Beta Testing of Beta Cooling: Gaseous Protoplanets from Disk Instabilities	5
Erika Nesvold	Why aren't there any highly eccentric debris disks?	4a
Jackie Faherty	Twinkle, twinkle, little brown dwarf	TV
Jessica Donaldson	Astrometry of the TW Hydra Association	4b
John Chambers	Pebble Accretion and the Diversity of Planetary Systems	30
Scott Sheppard	Why Your Horoscope Has Been Wrong All These Years	39
Serge Dieterich	What is Pulling on These Low Mass Stars?	28

## Theme: MATERIALS

Presenters	Title	Poster #
Ajay Kumar Mishra	High pressure and temperature synthesis and characterization of polyhydrides	27a
Haidong Zhang	Synthesis and Characterization of Metastable Elemental Allotropes	19
Hanyu Liu	Crystal structures of C-H system at high pressure	23
Hiroyuki Takenaka	First principles study of Mn-dopant in BaTiO <sub>3</sub>	15
Kadek Hemawan	High Pressure Microwave Plasma CVD for materials synthesis	10
Li Zhu	Prediction of exotic compounds in the Ca-B-C system under high pressures	2
Matthew Ward	High Pressure Cocystals	Wall
Michael Guerette	EBSD at GL/DTM	25
Nick Holtgrewe	X-ray and UV irradiated sodium azide	31
Qianqian Wang	Exploration of lithium carbide at high pressure	21
Raja Vadapoo	Polar Ordered Oxynitride Perovskites	12
Shi Liu	Make sense of ferroelectric switching	6
Todd Zapata	Engineering nanodiamonds with quantum system architecture	8
Tomasz Jaron	Adding more hydrogen - squeezing and heating	26
Venkata Bhadrani	Can rock-salt ZnO:MnO split water to produce hydrogen?	27b
Xiao-Miao Zhao	Superconductivity in Efficient Thermoelectric Cu <sub>3</sub> Sb <sub>0.98</sub> Al <sub>0.02</sub> Se <sub>4</sub>	36
Yangzheng Lin	Unique mechanical and electronic properties in interpenetrating graphene networks	13

## Theme: GEO

<b>Presenters</b>	<b>Title</b>	<b>Poster #</b>
Bob Hazen, Craig Schiffries, Andrea Mangum, Jenn Mays, Michelle Hoon-Starr	Deep Carbon Observatory Secretariat	9
Brad Foley	Early Earth geodynamics: Mantle mixing and lid mobility	35
Charlene Estrada	Across or Adjacent? Preferential Attachment of Sugars on Goethite	8b
Chris Thissen	Insights from mineral orientations	29
Corliss Kin I Sio	The isotope effect for diffusion: retrieving thermal histories of magmatic bodies	38b
Dan Hummer	The Carbon Mineral Challenge	24
Diana Roman	Explosion-triggered harmonic tremor at Popocatepetl Volcano, Mexico	3
Doug Rumble	Metabolic impact on clumped isotope distributions: A Panoramic view	1
Jesse Reimink	Using Nd isotopic composition to examine early Earth crust formation	20
Jonathan Wynn	Interpreting lacustrine and terrestrial paleoenvironments from stable isotope records in the Hominid Sites and Paleolakes Drilling Project Northern Afar core, Ethiopia	32
Michael Ackerson	Crystallization Below the Solidus: Taking Granite for Granted	22
Michael Meyer	Estimating oxygen availability and exchange in a fossil microbial mat using computed tomography X-ray imaging: Towards a model for passive irrigation of Lamonte trevallistraces	37
Miki Nakajima	Earth's Core Mixing and Mantle Melting by Impact	18
Myriam Telus	Carbonaceous chondrites and planetesimal formation and evolution	34
Neil Bennett	Conditions in the Proto-Earth from the Behaviour of Iron-Loving Elements	14
Peter Driscoll	Simulating Two Billion Years of Geodynamo History	16
Qingyang Hu	Discovery of FeO <sub>2</sub> and how it affects the looks of the lower mantle	33
Selwyn Sacks, Kiyoshi Suyehiro	Mountain Building in Japan, and Subduction Angle	11
Sergey Lobanov	Iron spins in the mantle	17
Steve Elardo	Non-chondritic iron isotope ratios in planetary mantles	38a
Steve Shirey	Superdeep diamond inclusion ages	7
Zack Geballe, Colin Jackson	Where have all the ices argon?	40