

**Tuesday, September 22, 2015**  
**POSTER SESSION: CRATER EXCAVATION AND MODIFICATION PROCESSES**  
**6:00 p.m. Geology Department**

Szokoluk M. Jagodziński R. Muszyński A. Szczuciński W.

[\*Ejecta Blanket from the Morasko Meteorite Impact — First Results\*](#) [#1100]

Morasko in the northern part of Poznań (western Poland) has witnessed the largest known iron meteorite shower in the central Europe. Apart from the thousands of iron meteorite pieces, the impact has left also at least seven meteorite impact craters.

Harris T. H. S.

[\*Suborbital Transport Mapping with Time Of Flight \(TOF\)\*](#) [#1042]

The suborbital paradigm is examined through proxies of orbital elements eccentricity  $e$  and semi-major axis  $a$ . Time Of Flight (TOF) domain and its analytic utility emerge. Strewn/ejecta relation to impact location, etc., are examined from TOF domain.

Harris T. S. H.

[\*Suborbital Deconvolution of Ejecta and Strewn\*](#) [#1021]

When loft time of ejecta becomes a significant fraction of planetary rotational period, hemispheric transport and convoluted emplacement mapping are enhanced. Suborbital deconvolution and impact test results may help locate modified impact structures.

Alwmark C. Ferrière L. Hofmann B. A. Holm-Alwmark S. Meier M. M. M.

[\*On the Impact Origin of the Anomalous “Blockhorizont” Layer in Eastern Switzerland\*](#) [#1005]

Here we confirm the presence of shocked quartz grains, by measurements and indexing of PDFs, in the so-called “Blockhorizont”, a 10–15 cm thick anomalous layer situated in Miocene Upper Freshwater Molasse in the North Alpine foreland basin.

Pietrek A. Kenkmann T. Jung D.

[\*Distribution and Source of Water in the Continuous Bunte Breccia Deposits of Ries Crater, Germany\*](#) [#1065]

We present new, detailed drill core profiles of two old cores (Itzing and Otting, 1977) sampling the BB and show examples for partial water saturation of certain lithologies during emplacement, evident by their deformational style.

Aschauer J. Kenkmann T. Rudolf M.

[\*Analogue Modeling of Impact Crater Formation Using Glassbead-Flour Mixtures\*](#) [#1037]

In an experimental series different mixtures of glass beads and flour are used to understand how the composition of the target affects the formation and morphology of craters in analogue modeling.

Hopkins R. T. Collins G. S. Osinski G. R. Silber E. A.

[\*Modelling the Effect of Material Anisotropy on Impacts into Layered Targets\*](#) [#1092]

We outline proposed adjustments to the strength model currently used in the hydrocode iSALE to account for transversely isotropic materials. We then explore the effect(s) that this implementation has on complex crater formation in layered targets.

Matysiak A. M. Winkler R. Kenkmann T.

[\*The Gardnos Crater: An Oblique Impact?\*](#) [#1061]

Structural analysis of the Gardnos crater suggests an oblique trajectory from SW. Indicators are a uniform orientation of foliated blocks suggesting complex rotation directions and a dominant fracture orientation (NE-SW) throughout the crater.

Kenkmann T. Sturm S. Krueger T. Salameh E. Konsul K.

[\*Jebel Waqf as Suwwan, Jordan: Results of a Field Campaign 2015\*](#) [#1074]

We present a new, detailed geological map of the 6 km Waqf as Suwwan impact crater. Special emphasis was drawn on the crater rim fault. Normal faulting is evident at the surface but reverse rim faulting is indicated by reflection seismic data.

Martellato E. Cremonese G. Lucchetti A. Bramson A. M. Byrne S.

[\*Modeling of Terraced Craters on Mars\*](#) [#1078]

Ice layers in Arcadia Planitia (Mars) was suggested by the presence of terraced craters and SHARAD profiles. Numerical modeling aims at placing additional constraints on the finer subsurface structure that leads to the double-terraced structure.