Tuesday, September 22, 2015
POSTER SESSION: GEOPHYSICS AND OTHER METHODS ON CRATERS SMALL AND LARGE
6:00 p.m. Geology Department

Lexow B. Bückle A. Wickert M. Hiermaier S.
The XLLGG — A Hypervelocity Launcher for Impact Cratering Research **[#1046]**
Hypervelocity launchers are used to accelerate projectiles that simulate impacting meteoroids or asteroids. The XLLGG (eXtra Large Light Gas Gun) at the EMI (Ernst-Mach-Institute) was used within the MEMIN program.

Martellato E. Schäfer C. Wandel O. Cremonese G. Kley W.
Bridging the Gap Between Hydrocodes **[#1082]**
Shock codes allow to study the impact cratering process at planetary scales. They differ from each others in the approach used to solve the equations of motions, and the constitutive equations. We aim at comparing iSALE and SPH codes in impact test cases.

Lambert P.
Drilling the Rochechouart Impact Structure **[#1039]**
Presenting the programme, scientific objectives and research opportunities of a series of 50 to 150 m deep drillings at Rochechouart planned to intersect the breccia deposit down to # 30 m beneath the crater floor along a 10 km diametric traverse.

Pohl J.
Modelling the Gravity Anomaly of the Rochechouart Impact Structure **[#1052]**
3-D modelling of the gravity anomaly of the Rochechouart impact structure is used to estimate the original size of the eroded crater.

Mayr S. I. Popov Yu.
Petrophysical Characteristics of Impaktites **[#1017]**
We give examples of petrophysical characteristics of Impactites. We differ between impact breccia and impact melt rocks, and shocked & displaced target rocks. We use our datasets obtained from Puchezh–Katunki, Ries, Chicxulub and Chesapeake.

Jõeleht A. Mustasaar M. Rooni K. Kalvāns A. Popovs K.
Reflection Seismic Study of the Dobele Impact Crater, Latvia **[#1105]**
The Dobele crater is a complex crater that is entirely in the sedimentary rocks, but not much has been published about it. Reflection seismic profiling aimed at detailisation of its size, location and inner structure including central uplift.

Zylberman W. Gattacceca J. Quesnel Y. Rochette P. Osinski G. R. Demory F.
Paleomagnetism in Complex Impact Structures: Examples from the Haughton and West Clearwater Impacts, Canada **[#1101]**
In this work, we present two new case studies to show possible applications of paleomagnetism to impact structures: (A) dating of the impact, and (B) understanding the geological impact processes.

Pleskot K. Szczuciński W. Makohonienko M. Tjallingii R. Apolinarska K. Woszczyk M.
Sedimentary Record of Morasko Meteorite Impact in Lake Sediments from the Region of Pozna? (Poland) — First Results **[#1069]**
Our studies are focused on the influence of the Morasko meteorite impact on adjacent areas. Investigations are based on sedimentological archives of lakes located in the vicinity of the Morasko craters.

Bronikowska M. Artemieva N. A. Wünnemann K. Szczuciński W.
Determining the Initial Parameters of the Morasko Meteoroid **[#1049]**
We combine an atmospheric entry model with modeling of crater formation. The aim is to determine initial parameters of the Morasko meteoroid, to reconstruct its evolution in the atmosphere and to investigate formation of individual craters.

Duczmal-Czernikiewicz A. Muszyński A.
Mineralogy of Sediments of the Region of the Morasko Meteorite Reserve **[#1095]**
Tested deposits show a variation in the vertical profile in terms of colour and composition of clay minerals. In the surface samples the presence of vermiculite was recorded. The impact could have resulted in clay clasts of grassy-green colour.

Losiak A. Wild E. M. Geppert W. D. Huber M. S. Jõeleht A. Kriiska A. Kulkov A. Paavel K. Pirkovic I. Plado J. Steier P. Välja R. Wilk J. Wisniowski T. Zanetti M.
Dating a Small Impact Crater: An Age of Kaali Crater (Estonia) Based on Charcoal Emplaced Within Proximal Ejecta **[#1070]**
The Kaali crater was formed shortly after (tpq) 1530–1455 BC (3237 ± 10 14C yr BP). This age is based on dating charcoal within the ejecta blanket that makes it directly related to the impact, and not susceptible to potential reservoir effects.

Reznik B. Kontny A. Agarwal A.
Lingunite Discovery in Doleritic Rock of the Lockne Impact Crater, Sweden: Evidence of Impact Energy Localization at Heterogeneous Mineral Interfaces **[#1027]**
This is the first report on high pressure-temperature phase transitions of plagioclase into lingunite at heterogeneous mineral interfaces in a terrestrial rock.