Monday, August 8, 2016
SHATTER CONES AND OTHER SHOCK EFFECTS
1:30 p.m. Room B

Chairs: **John Spray**
Sanna Holm-Alwmark

1:30 p.m. Osinski G. R. * Ferrière L.
Shatter Cones: (Mis)understood? **[#6392]**
In this study we provide new observations of shatter cones from several complex impact craters in various target rocks and in different preservation states. We show that shatter cones are present in several stratigraphic settings.

1:45 p.m. Buchner E. * Schmieder M.
Discovery of Possible Meteoritic Matter on Shatter Cones and Slickensides — 1. Ries Crater, Southern Germnay **[#6027]**
In the frame of the "Shatter Cone Coatings Project", we investigated shatter cones and slickensides from the Ries crater that locally contain high concentrations of Fe, Ni, P, and particles of Fe-Ni-Co metal and metal oxide, and of Fe-Ni phosphide.

2:00 p.m. Hasch M. * Reimold W. U. Raschke U. Zaag P. T.
Shatter Cones at the Keurusselkä Impact Structure and Their Relation to Local Jointing **[#6060]**
Field observation and micro-petrographic analysis were made at Keurusselkä (FI) to investigate the relation between shatter cones, joints, and shock micro-deformation. Additionally, the effect of the impact event on pre-existing joints was studied.

2:15 p.m. Wilk J. * Hamann C. Hecht L. Kenkmann T.
Melt Formation on Shatter Cone Surfaces Recovered from the MEMIN Hypervelocity Impact Experiments in Sandstone **[#6523]**
We studied with scanning electron microscopy data and white light interferometry µm think melt films formed on shatter cone fragments from hypervelocity impacts into sandstone.

2:30 p.m. Xie T. X. * Shieh S. R. S. Osinski G. R. O.
Raman Study of Shock Effects in Plagioclase Feldspar from the Mistastin Lake Impact Structure, Canada **[#6101]**
This study mainly uses Raman spectroscopy with a 514 nm laser to study anorthosite from Mistastin Lake Impact Crater, Canada, which mainly contains plagioclase with composition of An 28–55, to better understand shock processes in plagioclase feldspar.

2:45 p.m. Kowitz A. * Güldemeister N. Schmitt R. T. Reimold W. U. Wünnemann K. Holzwarth A.
Shock Classification of Porous Quartz-Rich Rocks — Improved Classification and New Calibration **[#6069]**
The results of shock recovery experiments with 1. porous, 2. water-saturated sandstone, 3. dense quartzite, at pressures ≤20 GPa (four different porosities) lead to revision and recalibration of existing shock classification for porous, quartzose rocks.