Tuesday, May 19, 2015
TELLING TIME: THE CRATER CHRONOLOGY
8:00 a.m. E200 Auditorium

Chairs: Catherine Plesko
        Joseph Boyce

8:00 a.m. Robbins S. J. *
Introduction and Logistics

8:10 a.m. Hiesinger H. *
Lunar Impact Cratering: A Brief Review and Perspective [#9030]
We will provide a brief review of lunar impact cratering and will discuss the use of impact craters for
dating planetary surfaces.

8:50 a.m. Hartmann W. K. *
Crater Chronometry: Early History and Current Issues [#9004]
This invited talk reviews the early history of crater chronometry, and comments on current issues. It
is suggested that the classic "terminal cataclysm" scenario, with most lunar basins forming in a 150 Ma
interval, may not have occurred.

9:30 a.m. Robbins S. J. *
The Lunar Crater Chronology: History, Current Knowledge, and Holes [#9017]
A discussion of how the lunar crater chronology is established along with issues and suggestions of
future research directions to better constrain this important research tool.

9:55 a.m. BREAK

10:05 a.m. Anderson F. S. *  Draper D. S.  Christensen P. R.  Olansen J. B.  Devolites J. L.  Harris W.
Whitaker T. J.  Levine J.
Improving Solar System Chronology with Lunar In-Situ Dating: The MARE
Discovery Mission [#9058]
We describe new in-situ dating results and how they enable a mission to improve solar system
chronology by dating of young lunar volcanic terrains.

10:30 a.m. Lindsay F. N. *
Careful with that Argon, Eugene [#9045]
Not all Ar/Ar age dates are equally robust, nor do all meteoritic lithologies give ages that can be
associated with discrete events. A few different lithologies are considered.

10:55 a.m. DISCUSSION