

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