## A TOUR OF THE MODERN HISTORY OF ECLIPSE CALCULATIONS, INCLUDING THE CURRENT STATE OF THE ART AND A LOOK AHEAD TO FUTURE DEVELOPMENTS

## DAN MCGLAUN

Eclipse calculation veteran Dan McGlaun will offer a tour of the modern history of eclipse calculations: From the fundamentals of Newton and Halley, through the 19th century developments of Bessel, Chauvenet, Hansen, Newcomb, Auwers and others, to the 20th century developments and refinements of Comrie, Meeus, Atkinson, Danjon, Watts, Herald and Duncombe. Dan will offer the current state of the calculation world, as brought to the fore by Druckmüller, Kramer, Espenak, Zeiler, Jubier, Schneider, and his own Eclipse2024.org simulator. Finally, we'll touch on the advancements made possible by Kaguya and NASA's LRO, and finish the whirlwind tour with a taste of what's next - from Dan's own research as well as that from Ernie Wright (NASA) and the Quaglia/Irwin/Emmanoulidis/Pessi/Kafka team.