



COLLOQUIUM

Thursday, April 24, 2025

[Join Zoom Meeting](#)

April 24, 2025

1:00 pm – 2:00 pm MT

Meeting ID: 161 864 5341 - Passcode: 607380

Speaker: Michelle J. Creech-Eakman

Affiliation: NMT

A Prelude to First Fringes with the MRO Interferometer

Long-baseline optical interferometry is arguably the only method that can be used to understand some of the most complex astrophysical questions that are still outstanding today. The Magdalena Ridge Observatory Interferometer, located just outside Socorro, NM, is on the verge of producing “first fringes” – the initial system measurement that demonstrates the sensitivity and precision of a new interferometer. Although it has been a long and occasionally perilous trip to get to this point, our plan in the next few years is to move ahead with the complete design of the interferometer system – ultimately consisting of 10 moderate aperture movable telescopes on an array of baselines stretching to nearly 350 m – which will allow for model independent imaging of a variety of faint and complex sources. I will present our vision design, some initial and aspirational science cases we plan to undertake, and progress anticipated in the next few years.