

UHECR Reverberation from the Council of Giants

Tuesday, 4 October 2022 14:00 (20 minutes)

Recent observations by the PAO indicate a correlation between UHECRs and the local galactic structure. We explore the possibility that this correlation is brought about by UHECRs having a single origin, and subsequently ballistically propagating in extragalactic space before reverberating off the local galactic within the Council of Giants. Focusing effects within the reverberated wave structure observed are discussed. We demonstrate that such a scenario imprints itself on the composition of the direct wave from the primary source, and secondary reverberated waves from the local structure.

Primary authors: Dr TAYLOR, Andrew (DESY); Prof. BELL, Tony (University of Oxford); Dr MATTHEWS, James (University of Cambridge)

Presenter: Dr TAYLOR, Andrew (DESY)