IWARA2022 - 10th International Workshop on Astronomy and Relativistic Astrophysics



Contribution ID: 99 Type: Talk (in-person)

The Archaeoastronomy of Tikal, Guatemala: A Reanalysis

Monday 5 September 2022 09:20 (20 minutes)

The great Maya city of Tikal was a major center of political, economic, and religious influence from its earliest pre-classic foundations to its classic period heights— through its fall and reestablishment, until its eventual abandonment. Like many other polities of the ancient Maya, Tikal's city-planning and architectural organization was designed to incorporate the beliefs and principles of the Maya cosmos. It's earliest ceremonial plaza, the Mundo Perdido, is one of the oldest pre-Classic E-Groups of the Petén; the astronomy of E-Groups is a topic which has been debated by archaeologists and archaeoastronomers alike over the past century. New measurements of Mundo Perdido will be analyzed within the framework of recent E-Group theories posited by Ivan Ŝprajc (2021). In 1988 Aveni and Hartung discussed the archaeoastronomy and dynastic history at Tikal. Breakthroughs in the decipherment of the Maya glyphs over the intervening decades has greatly increased our understanding of Tikal's dynastic history while interpretations in the field of archaeoastronomy have become more rigorous. In this light, the resurvey and reanalysis of several Tikal's great temples is warranted. Lastly, it will be demonstrated that the unique twin-pyramid complexes of Tikal not only exemplify many of Ashmore's (1991) principal components of the Classic Maya cosmological template, but also present grand three-dimensional models of the Sun's movement through the cosmos— constructed in celebration of calendrical period endings.

Authors: LAYSER, Christopher (University of Oklahoma); GULLBERG, Steven (University of Oklahoma)

Presenter: GULLBERG, Steven (University of Oklahoma)