

Astronomical Computation in the Pre-Modern World
Methods – Tables – Accuracy

Workshop
11-12 April 2024

ZODIAC - Ancient Astral Science in Transformation (ERC)
Institute for the History of Knowledge in the Ancient World
Freie Universität Berlin

Fabeckstraße 23-25, room 2.2058

Organisers: Mathieu Ossendrijver, Thomas Peeters

Thursday 11 April 2024

- 09:30 - 09:45 Introduction
- 09:45 - 10:30 **Alexander Jones** (New York University)
Greco-Egyptian Sign-Entry Almanacs Beyond Van der Waerden: Questions of Accuracy and Derivation
- 10:30 - 11:00 Break
- 11:00 - 11:45 **John Steele** (Brown University)
Calculating the Lunar Six: Evidence from Practice
- 11:45 - 12:30 **Lis Brack-Bernsen** (Universität Regensburg)
The Usefulness of Computer Simulated Lunar Data
- 12:30 - 14:00 Lunch
- 14:00 - 14:45 **Thomas Peeters** (Freie Universität Berlin - ZODIAC)
Accuracy of Ancient Jupiter Tables Across Time and Place
- 14:45 - 15:30 **Marc Chapuis** (Brown University)
Computational Analysis of Chinese Astronomical Systems: Work-in-progress on Yixing's Great Expansion System
- 15:30 - 16:00 Break
- 16:00 - 16:45 **Rob van Gent** (Universiteit Utrecht)
Predicting Eclipses in the Late Medieval and Early Modern Period
- 16:45 - 17:30 **Christián Carman** (Universidad Nacional de Quilmes)
What Can We Learn From a Two-Page Manuscript of Tycho Brahe Full of Calculations?
- from 17:30 Reception at ZODIAC (Arnimallee 10)

Friday 12 April 2024

- 09:30 - 10:15 **Sajjad Nikfahm-Khubravan**
The Empirical Foundation of Ptolemy's Oscillating Eccentrics in the *Almagest*
- 10:15 - 11:00 **Benno van Dalen** (Bayerische Akademie der Wissenschaften)
Calculation of the Equations of Mercury in al-Ṭūsī's Recension of the *Almagest*
- 11:00 - 11:30 Break
- 11:30 - 12:15 **Richard Kremer** (Dartmouth College)
An Alfonsine Astrologer's Toolbox, or Computing Ephemerides 1442-73 in Paris, BnF lat. 7301
- 12:15 - 13:00 **Mathieu Husson** (Université Paris Sciences et Lettres)
Probatio Operationis, Alfonsine Astronomers' Views on Accuracy and the Epistemological Values of Computation
- 13:00 - 14:30 Lunch
- 14:30 - 15:15 **Teije de Jong** (Universiteit van Amsterdam)
Tablet U 98: The Remains of an Interesting Jupiter System B Ephemeris from Uruk
- 15:15 - 16:00 **Mathieu Ossendrijver** (Freie Universität Berlin - ZODIAC)
A Close Look at the Babylonian Jupiter Tables
- 16:00 - 16:30 Break
- 16:30 - 17:15 **Anuj Misra** (Max-Planck-Institut für Wissenschaftsgeschichte Berlin; Freie Universität Berlin)
Tabulating the Heavens: Astronomical Tables in Sanskrit
- 17:15 - 17:30 Closing remarks
- from 17:30 Reception at ZODIAC (Arnimallee 10)