

## Quantity, Extension, and Infinity in the 13th and 14th Centuries

# RESEARCH WORKSHOP OF THE ISRAEL SCIENCE FOUNDATION

**5–8 June 2023, Tel Hai**

Organized by: Giora Hon and Yael Kedar

### Monday June 5

Seminar room (2318), Eastern Campus

**9:30–10:00** – Welcome and opening remarks

**10:00–11:30** – Quantity, Matter and Bodies

Chair: Cecilia Trifogli

>> Expanding quantity: Robert Grosseteste on the bodily form

Nicola Polloni (KU Leuven)

>> The unity of matter, extension and potentiality in late thirteenth century natural philosophy

José Filipe Silva (University of Helsinki)

**11:30–11:45** – Coffee break

**11:45–13:15** – Metaphysics, Quantification, and Duality

Chair: Nicola Polloni

>> Numbers and diagrams: Shao Yong (1012–1077) and his legacy in 11th–13th century China

Sophia Katz (Tel Hai College)

>> The substance and function (ti-yong) formula and Aristotle's hylomorphic model

Gad C. Isay (Tel Hai College)

**13:15–14:15** – Lunch break

**14:15–15:45** – Continuity, Quantity, and the Aristotelian Categories

Chair: Ruizhi Ma

>> Fakhr al-Din al-Razi on the category of quantity

Ahmed Igbariah (Tel Aviv University)

>> Continuity, limits, and quantity in Al-Farabi's paraphrase of Aristotle's Categories

Yehuda Halper (Bar Ilan University)

**15:45–16:00** – Coffee break

**16:00–17:30** – God's Unity and Infinity

Chair: Yael Kedar

>> From horror vacui to amor infini: The context and function of ornamentation considering the notions – void, infinity, and the place of God

Danielle Omesi Moisa (Tel Aviv University)

>> Measures in the Lucca Codex: Following instructions and making mistakes

Yael Barash (Tel Aviv University)

## Tuesday June 6

“Agur” Conference room in the Hula Lake Park

### 10:00–11:30 – Infinity and Infinities

Chair: Clelia Cialesi

>> Actual infinities of different kinds in Richard Kilvington’s philosophical and theological texts

Robert Podkoński (University of Łódź)

>> Quantity and infinity in Jacques Legrand’s *Compendium utriusque philosophie*: A late nominalist approach to Aristotle

Daniel A. Di Liscia (LMU Munich)

11:30–12:15 – A visit to the Agamon wildlife rehabilitation center. Guide:

Dr. Rona Nadler-Valensi

### 12:15–12:30 – Coffee break

### 12:30–14:00 – Measuring Forms

Chair: Daniel A. Di Liscia

>> Richard Kilvington’s concept of measuring the qualitative changes by the latitude of forms

Elżbieta Jung (University of Łódź)

>> From the measure of qualities to the quantification of metaphysical essences. On some 14th-century applications of limit decision problems to the perfection of species

Sylvain Roudaut (Stockholm University)

### 14:00–15:00 – Lunch break

### 15:00–16:30 – Nature and Minimal Parts

Chair: Sophia Katz

>> John Buridan and the piecemeal view of substantial change

Roberto Zambiasi (University of Torino)

>> Nicholas d’Autrécourt on minima and indivisibles

Aurélien Robert (CNRS, Université de Paris)

### 16:30–16:45 – Coffee break

### 16:45–18:15 – All the Time in the World

Chair: Roberto Zambiasi

>> Crescas’ conception of infinite magnitudes

Avishay Gallili (Tel Hai College)

>> Does the *aevum* have parts? Some 13th-century reflections on the simplicity of eviternity

Dominic Dold (University of Notre Dame) On zoom.

## Wednesday June 7

Seminar room (2318), Eastern Campus

**9:30–11:00** – *Philosophical and Theological Aspects of Quantity*

Chair: Sylvain Roudaut

>> *William of Ockham on the ontological status of quantity*

*Cecilia Trifogli (Oxford University)*

>> *Quantity, place, and perception in 13th-century Eucharistic debates*

*Julia Reed (Bar Ilan University)*

**11:00–11:45** – *A visit to the historical cartography collection. Guided by: Shalom Termechy*

**11:45–12:00** – *Coffee break*

**12:00–13:30** – *Round Table Discussion*

Chairs: Nicola Polloni and Yael Kedar

>> *History – philosophy – science: Disciplinary and methodological intertwining*

**13:30–14:30** – *Lunch break*

**14:30–16:00** – *Geometrical Objects in Continuous Space*

Chair: Elżbietą Jung

>> *Gregory of Rimini on infinite extended quantities*

*Clelia Cialesi (KU Leuven)*

>> *An impossible synthesis: Geometrical atomism vs. the continuity of matter,*

*Roger Bacon's solution*

*Yael Kedar (Tel Hai College)*

**16:00–16:15** - *Coffee break*

**16:15–17:45** – *Color and the Perception of Quantities*

Chair: Giora Hon

>> *How big is a red square? Two ways of accounting for the perception of quantities in the thirteenth century*

*Elena Baltuta (Tel Hai College)*

>> *Unquantifiable color power and discontinuous color order in Avicenna and Naṣīr al-Dīn al-Ṭūsī*

*Ruizhi Ma (Humboldt University, Berlin)*