

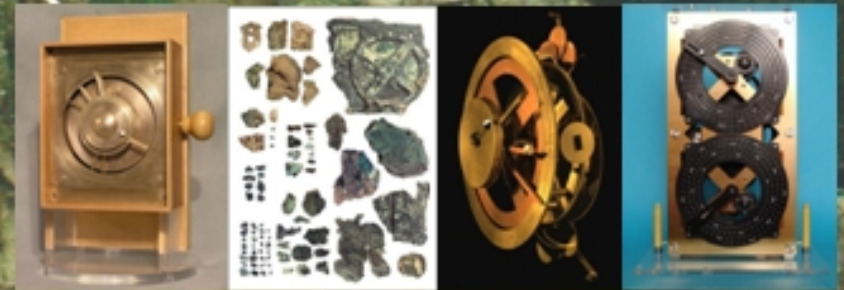
# Antikythera mechanism

30 oktober 2009

**Museum van het Nederlandse Uurwerk**  
Kalverringdijk 3 \* Zaanse Schans \* Zaandam

## Hemels raderwerk

De heruitvinding van het Antikythera-mechaniek



**Symposium 30 oktober 2009**

Locatie: Michaelcollege, Zaandam; Aanvang: 13.00 uur

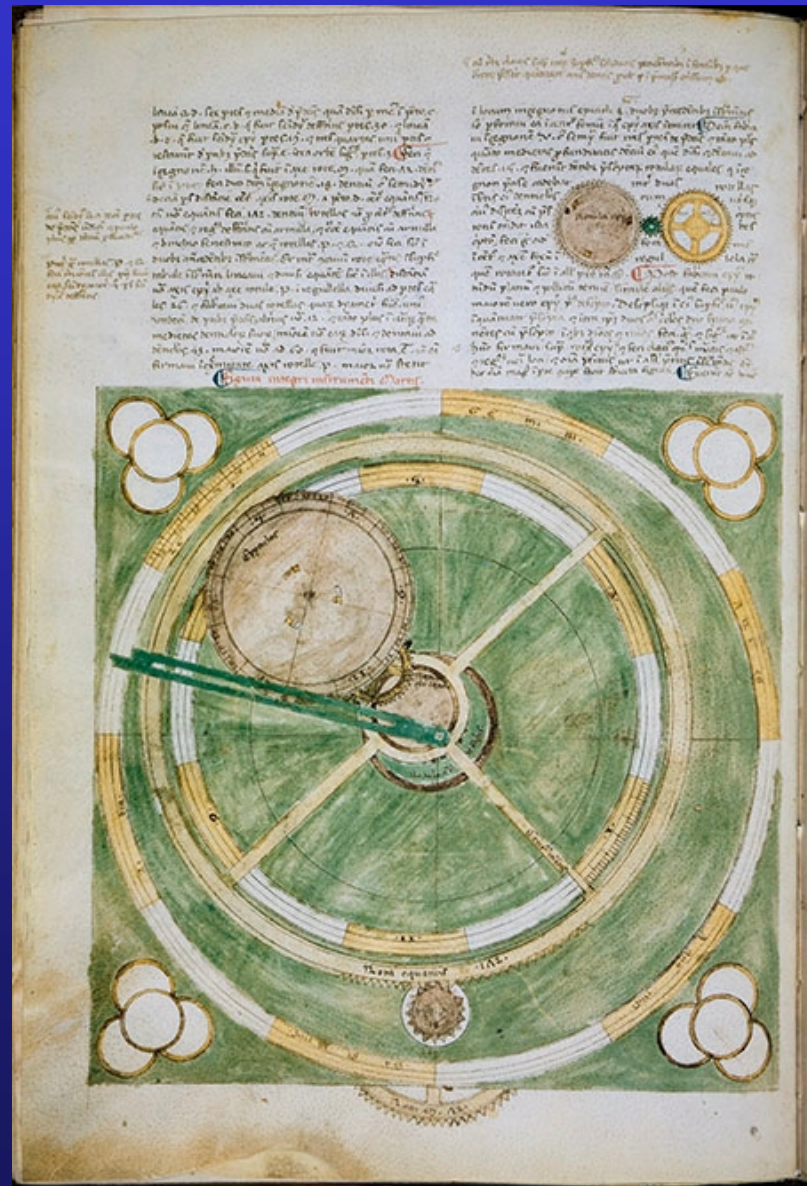
Met medewerking van:

Vincent Icke  
Rien van de Weygaert  
Niels Bos  
Teun Koetsier  
Michael Wight  
Tatjana van Vark  
Kees Grimbergen

Aanmelding: [www.mnuurwerk.nl](http://www.mnuurwerk.nl)



# Astrarium De Dondi, 1348-1364



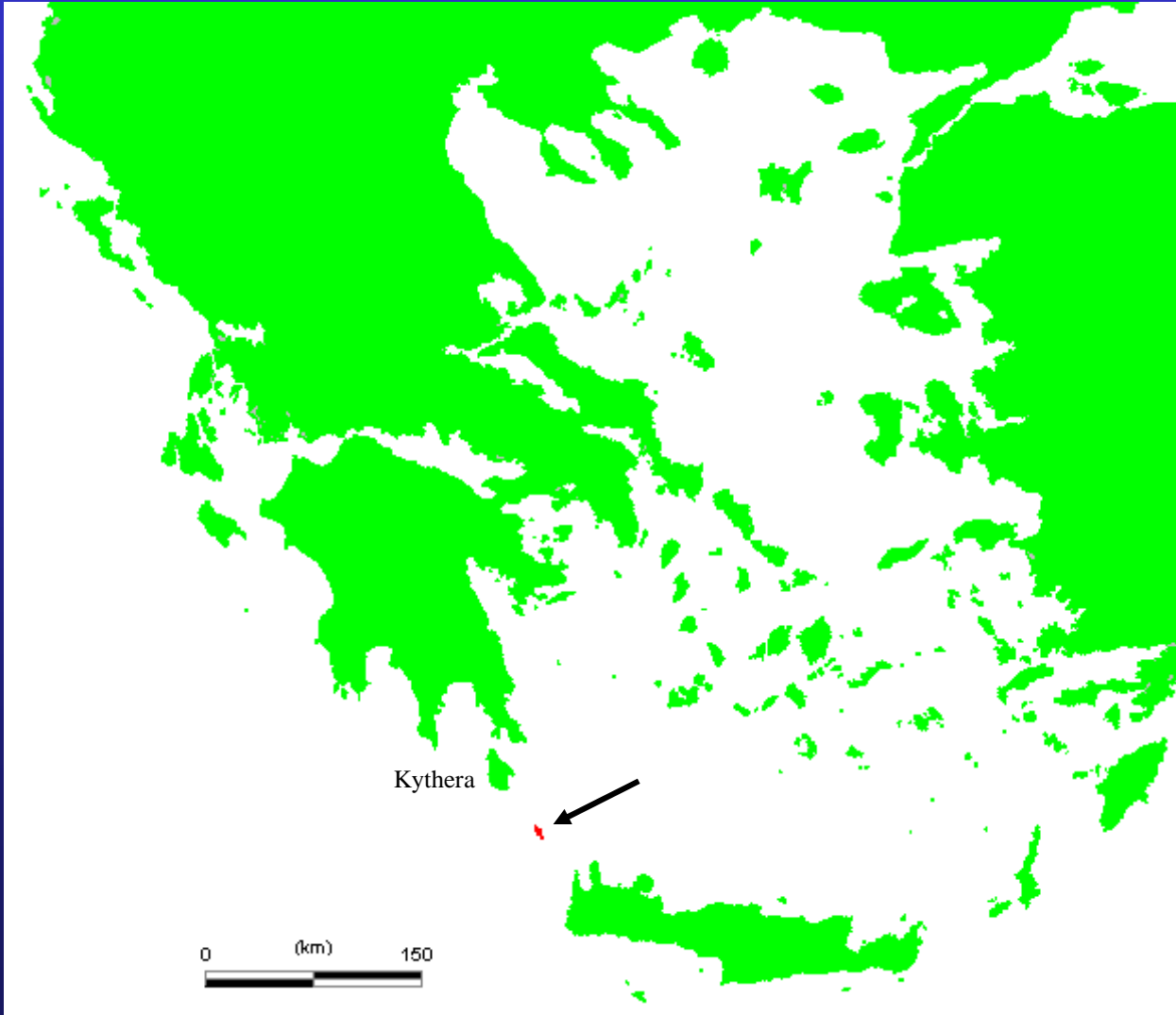
- Vroeg uurwerk
- Model
- Zonnestelsel (Ptolemaeus)
- \* Zon
- \* Maan
- \* Mercurius
- \* Venus
- \* Mars
- \* Jupiter
- \* Saturnus

Replica

La Chaux de Fonds

# Antikythera 1900

Cargo 80 - 50 BC





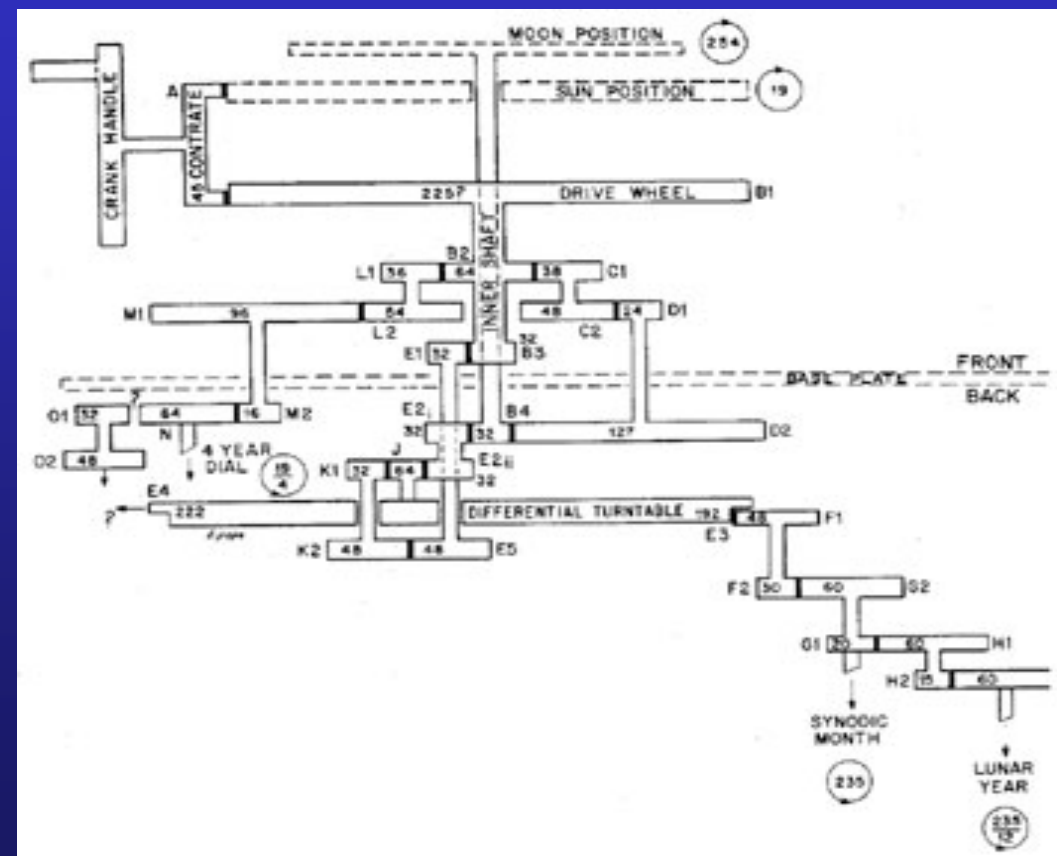
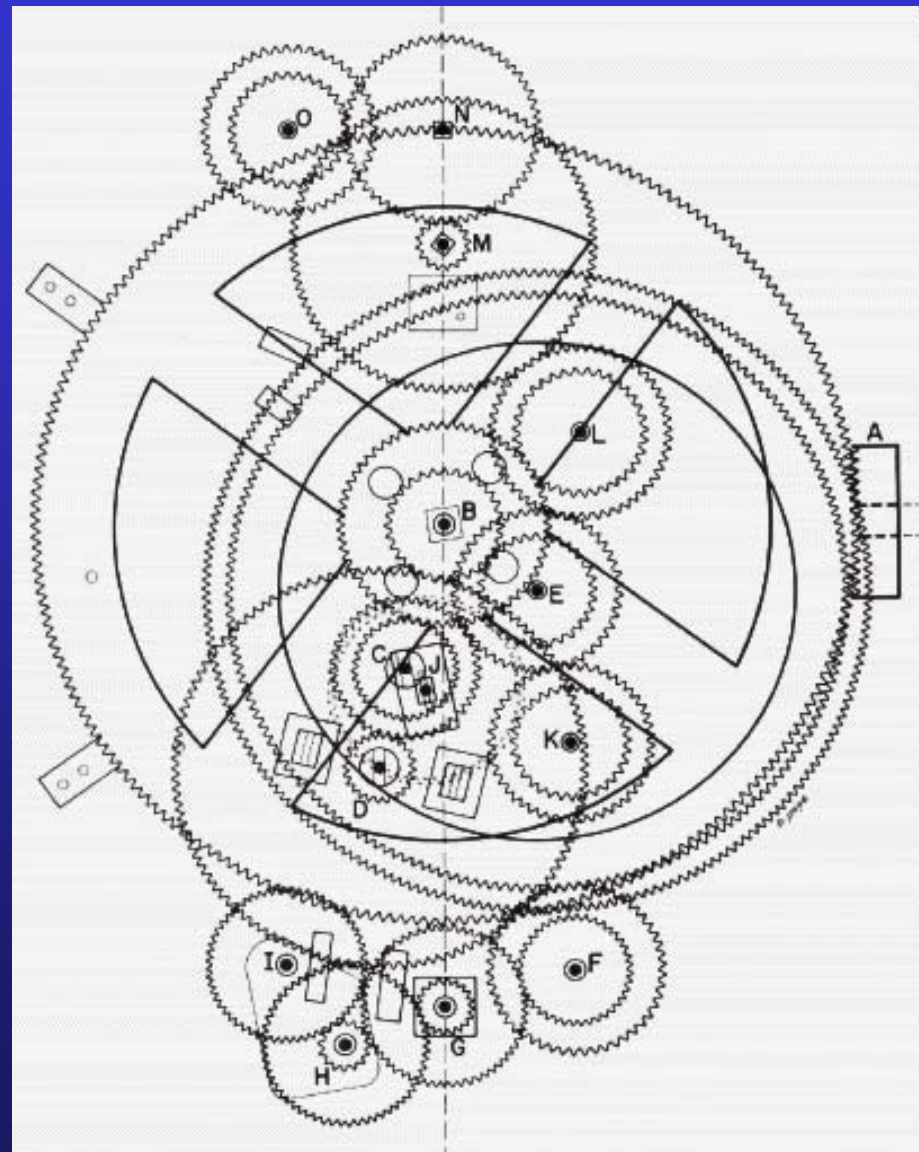
# The Antikythera

## Mechanism

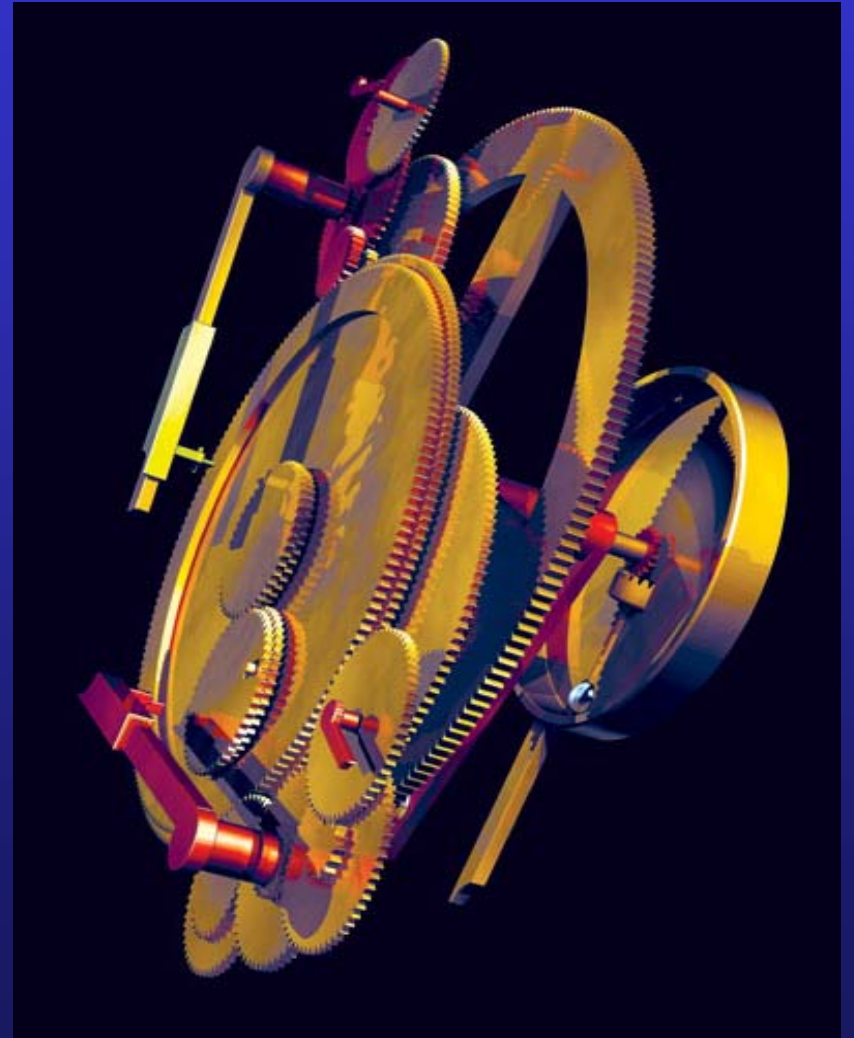
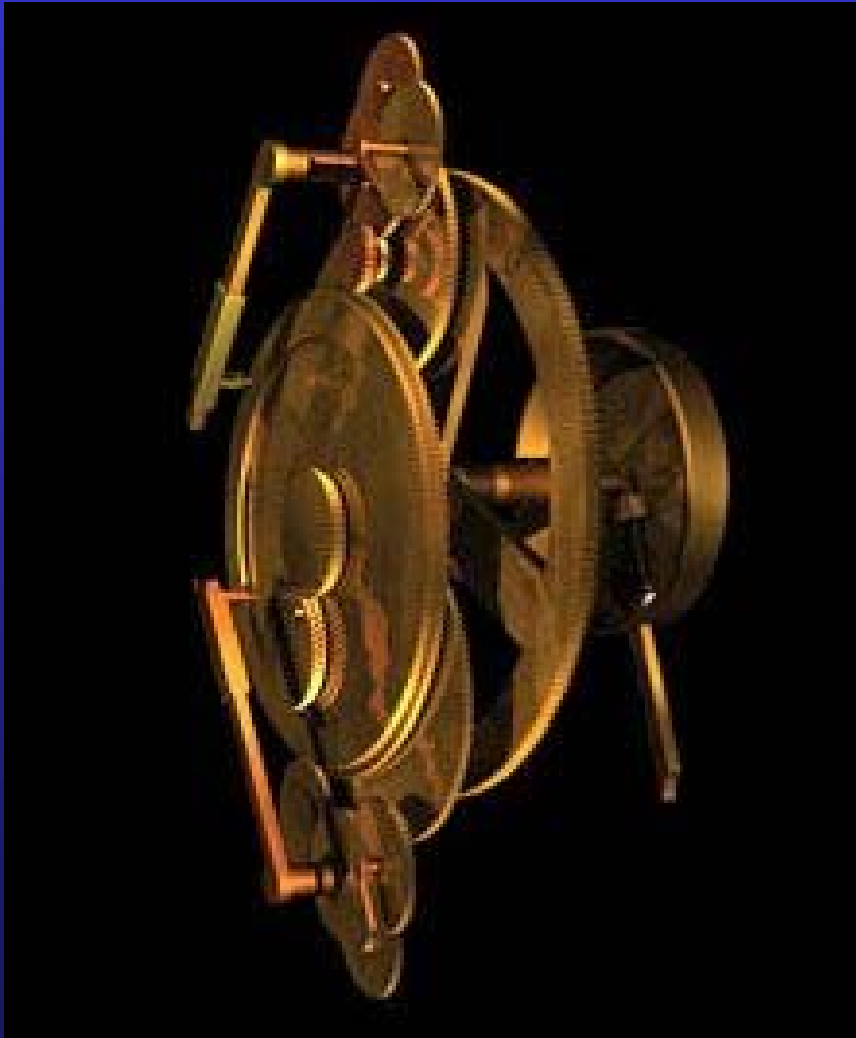


Greece ca 150 BC, > 30 gears, 4 dials

# Antikythera Mechanism



# Antikythera Mechanism



# Antikythera mechanism

Specifications:

- Sun pointer
- Moon pointer, phase (sphere)
- Metonic cycle, Olympic cycle, Callipic cycle
- Eclipses (Saros cycle, Exeligmos cycle)
- Planets??



# Antikythera mechanism

Developments:

- De Solla “Price Gears from the Greeks” 1974



- Michael Wright (Science Museum) 1990 -



- Antikythera Mechanism Research Project 2000 –  
Cardiff - Tony Freeth





# Antikythera mechanism

## Technology:

- De Solla Price 1974: X-ray
- Michael Wright 1990 - : Linear tomography
- Antikythera Mechanism Research Project 2000 –:
  - Computer Tomography: X-tek Blade runner  
350kV, resolution approx. 75 $\mu$ m
  - Polynomial Texture Maps : PTM Hewlett-Packard

# Antikythera mechanism

Replica's:

- De Solla Price 1974:
- Michael Wright 1990 - :
- Van Vark



<http://www.tatjavanvark.nl/antikythera/>

# Antikythera mechanism; animation



Massimo Mogi Vincentini: <http://www.mogi-vice.com>