

TokyoTech (Tokyo Institute of Technology), HMA (History of Mathematics and Astronomy)

Lecture note 8: (2019)

(Development of modern mathematics and astronomy; Conclusion)

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## Mathematics and astronomy in Medieval Europe

See my Lecture note 7

As I could not explain this section in the last lecture, I would like to use this part in my Lecture note 7 for my last lecture.

## Errata

Lecture note 7, p.18, the title of the reference;

For 『グレゴリア聖歌選集』, read 『グレゴリオ聖歌選集』.

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## **Development of modern mathematics and astronomy**

**Nicolaus Copernicus (1473 – 1543)**

**Tycho Brahe (1546 – 1601)**

**Simon Stevin (1548 – 1620)**

**John Napier (1550 – 1617)**

**Francis Bacon (1561 – 1626)**

**Galileo Galilei (1564 – 1642)**

**Johannes Kepler (1571 – 1630)**

**René Descartes (1596 – 1650)**

**Blaise Pascal (1623 – 1662)**

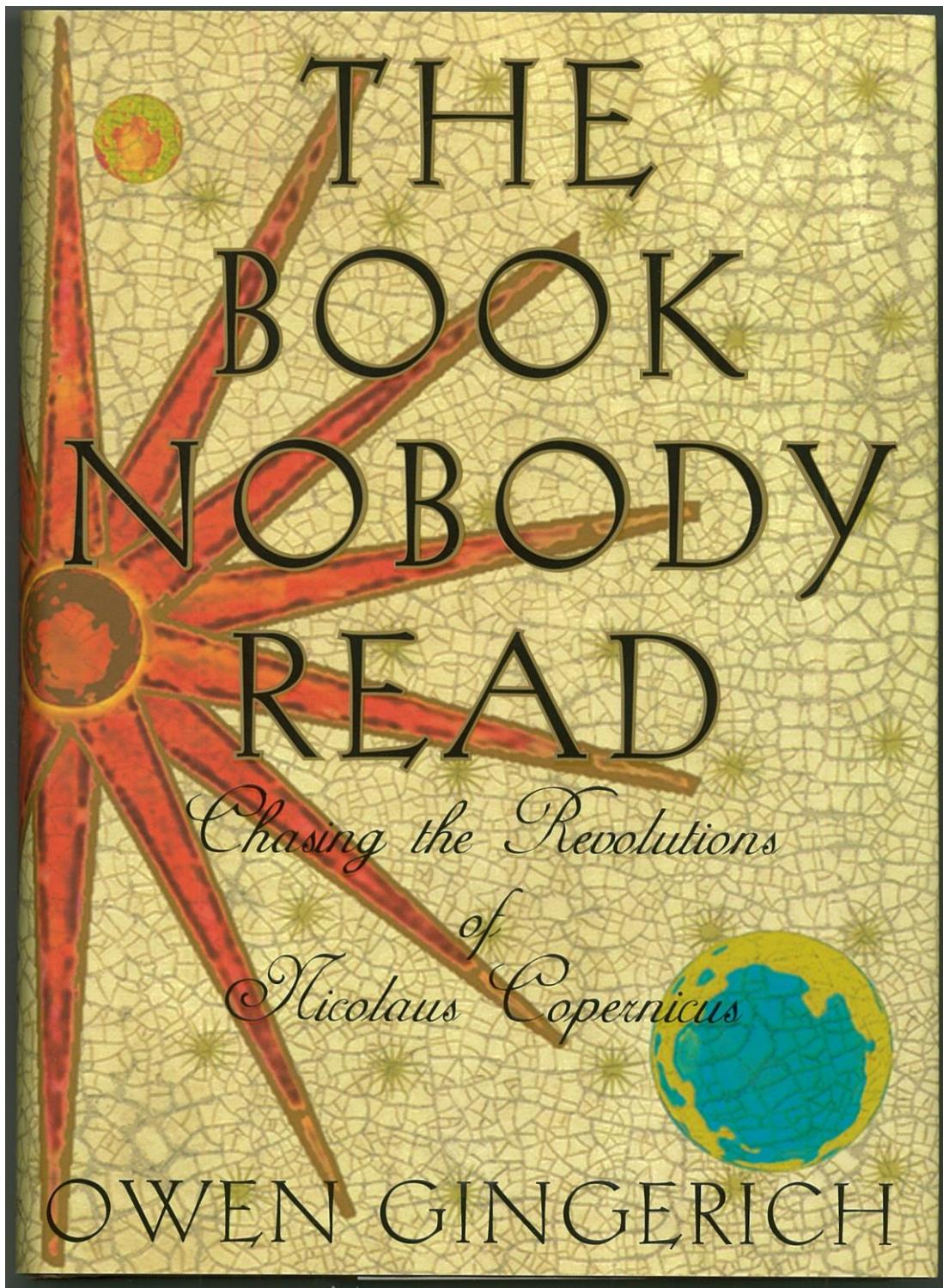
**Christiaan Huygens (1629 – 1695)**

**Isaac Newton (1642 – 1727)**

**Gottfried Wilhelm Leibniz (1646 – 1716)**

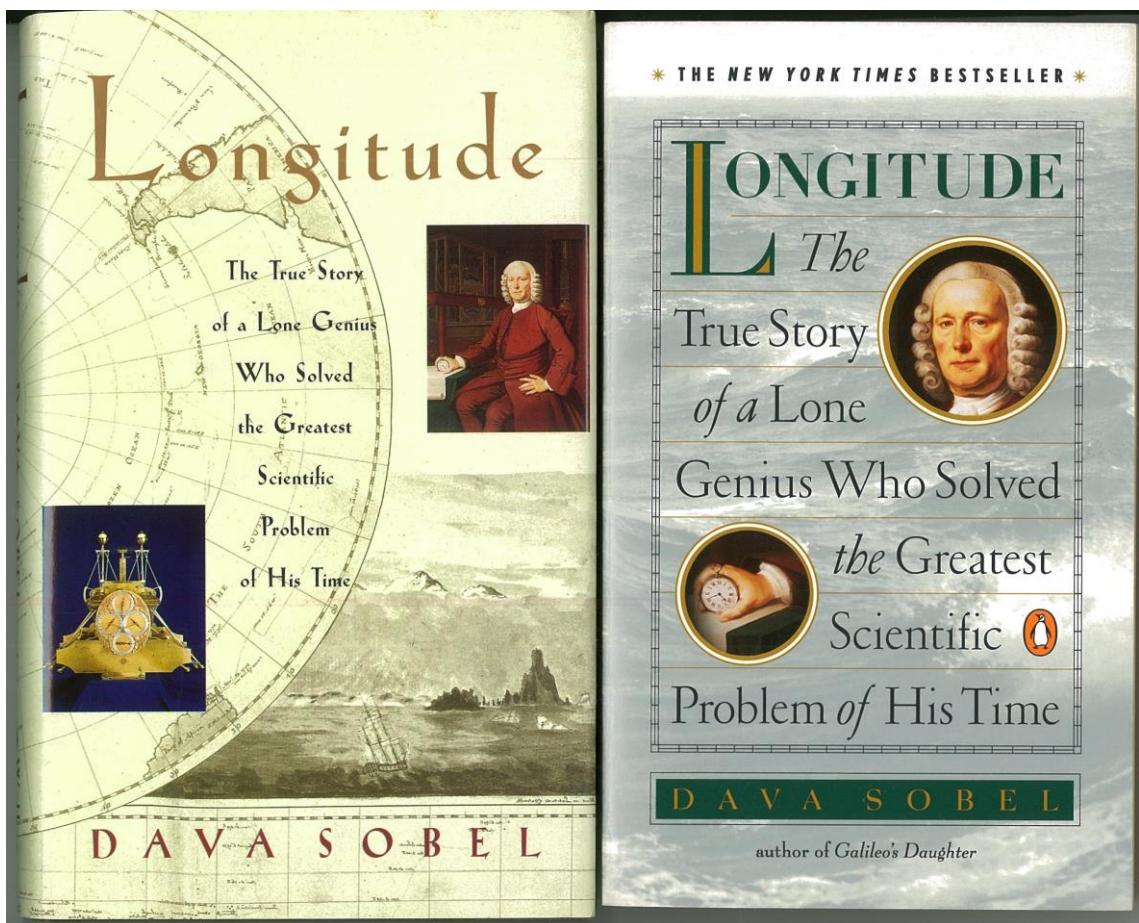
And many more.

I would like to recommend two interesting books.



Published by Walker & Company, New York, 2004.

(Japanese translation: オーウェン・ギンガリッチ (柴田訳) 『誰も読まなかつたコペルニクス』、早川書房, 2005.)



(Left:) Published by Walker and Company, New York, 1995.

(Right:) Published by Penguin Books, London, 1996.

(Japanese translation: デーヴァ・ソベル (藤井訳) 『経度への挑戦』、角川文庫, 2010.)

## Additional readings

(Japanese mini lecture 5): 大橋由紀夫「科学史ミニ講義(5), 地動説から古典力学へ」、『科学史通信』 No.399, 2010.

(Japanese mini lecture 6): 大橋由紀夫「科学史ミニ講義(6), 電気力学と熱力学はなぜ「力学」なのか」、『科学史通信』 No.400, 2010.