

ANG JL JAN 2014

SEC 4 PHYSICS



CONTENTS

- Overview
- Syllabus
- Schedule
- Assessment
- Expectations
- Next lesson

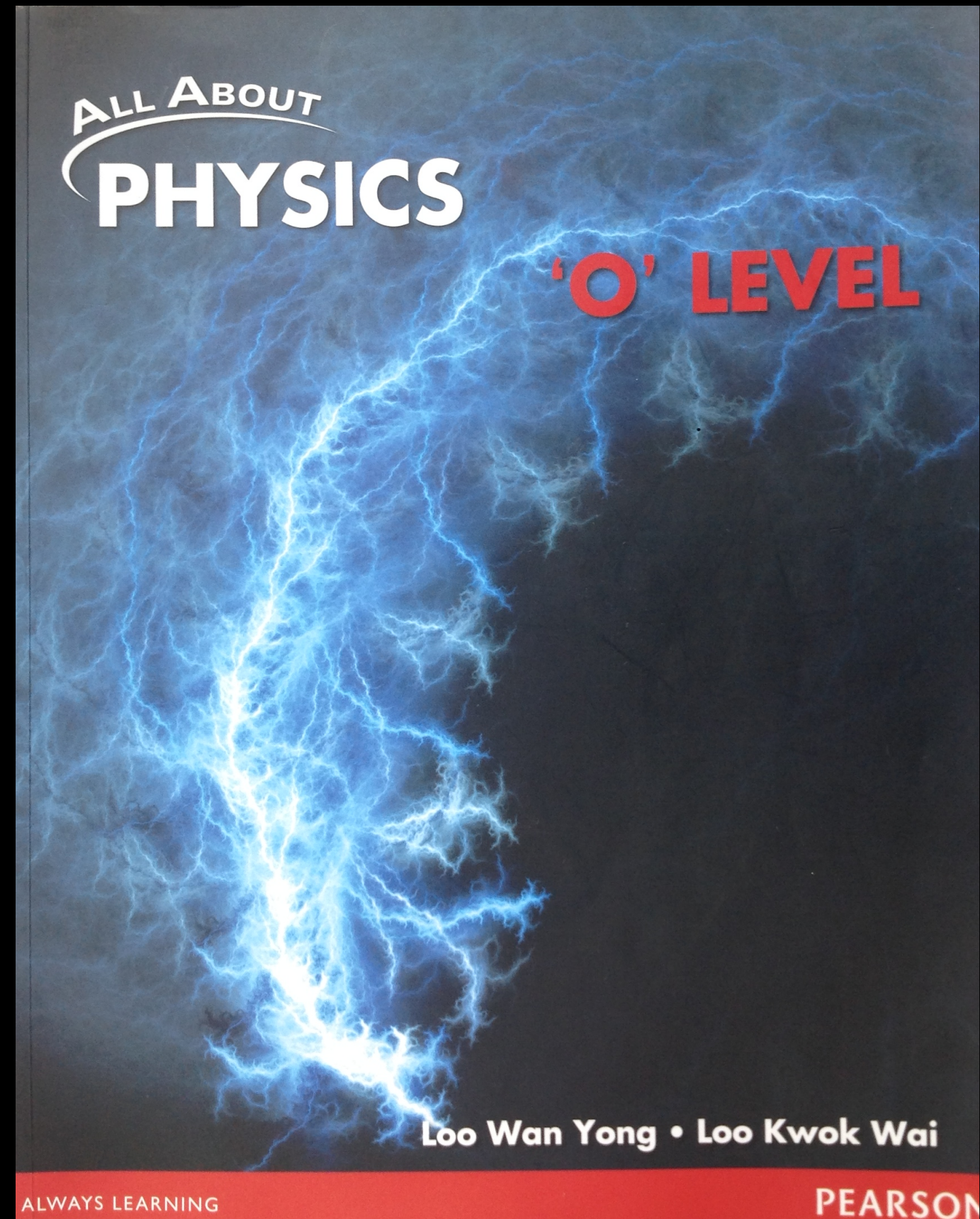


MR ANG JOO LIAK

- Email: ang_joo_liak@nygh.edu.sg
- Website: <http://nyghsec3physics.pbworks.com>

PHYSICS MATERIALS

1. Reference book: All about Physics
2. All lessons: calculator
3. All practical lessons: 30-cm semi-transparent ruler



PHYSICS ASSESSMENT

- CA1 (15%): practicals, quizzes, SPA (from Sec 3)
- SA2 (25%): Mid-year Exams
- CA2 (15%): practicals, quizzes, Sec 4 SPA skill 2 & 3
- SA2 (45%): EOY Exams

Why do I study physics?



<http://youtu.be/pom8S7qF5Gk>

STEPHEN HAWKING (1942-)



- He was born on January 8, 1942, in Oxford, England.
- At an early age, Hawking showed a passion for science and the sky.
- At age 21, while studying cosmology at the University of Cambridge, he was diagnosed with Amyotrophic Lateral Sclerosis (ALS).
- Despite his debilitating illness, he has done ground-breaking work in physics and cosmology, and his several books have helped to make science accessible to everyone.

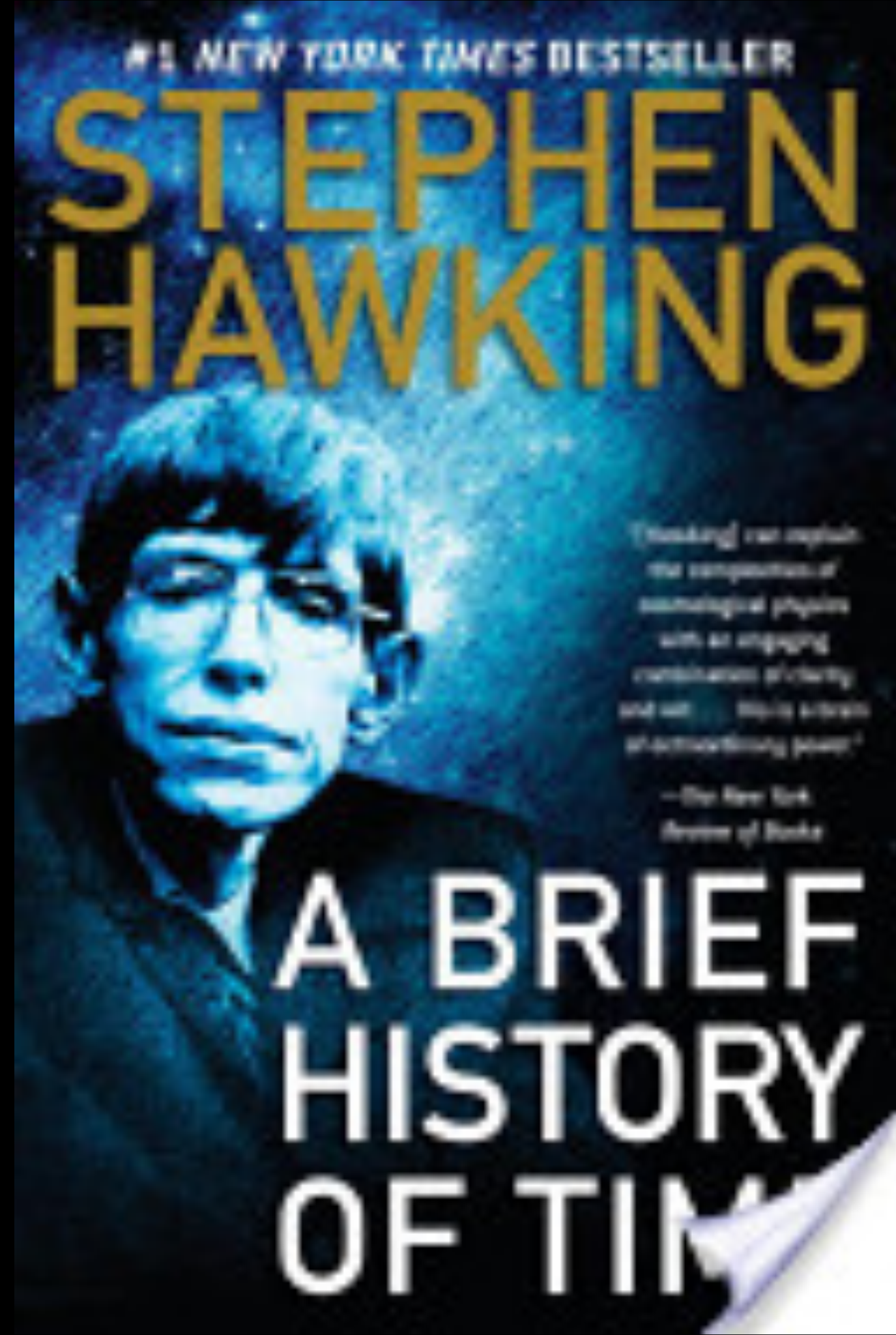
STEPHEN HAWKING(1942-)



- After he was diagnosed with ALS, doctors gave him 2 and a half years to live.
- "I was bored with life before my illness," he said. "There had not seemed to be anything worth doing."
- With the sudden realization that he might not even live long enough to earn his Ph.D., Hawking poured himself into his work and research.

- He is known for his contributions to the fields of cosmology and quantum gravity, especially in the context of black holes.
- These include *A Brief History of Time* which spent more than 4 years on the London *Sunday Times* best-seller list.

<http://www.biography.com/people/stephen-hawking-9331710?page=2#als-diagnosis>



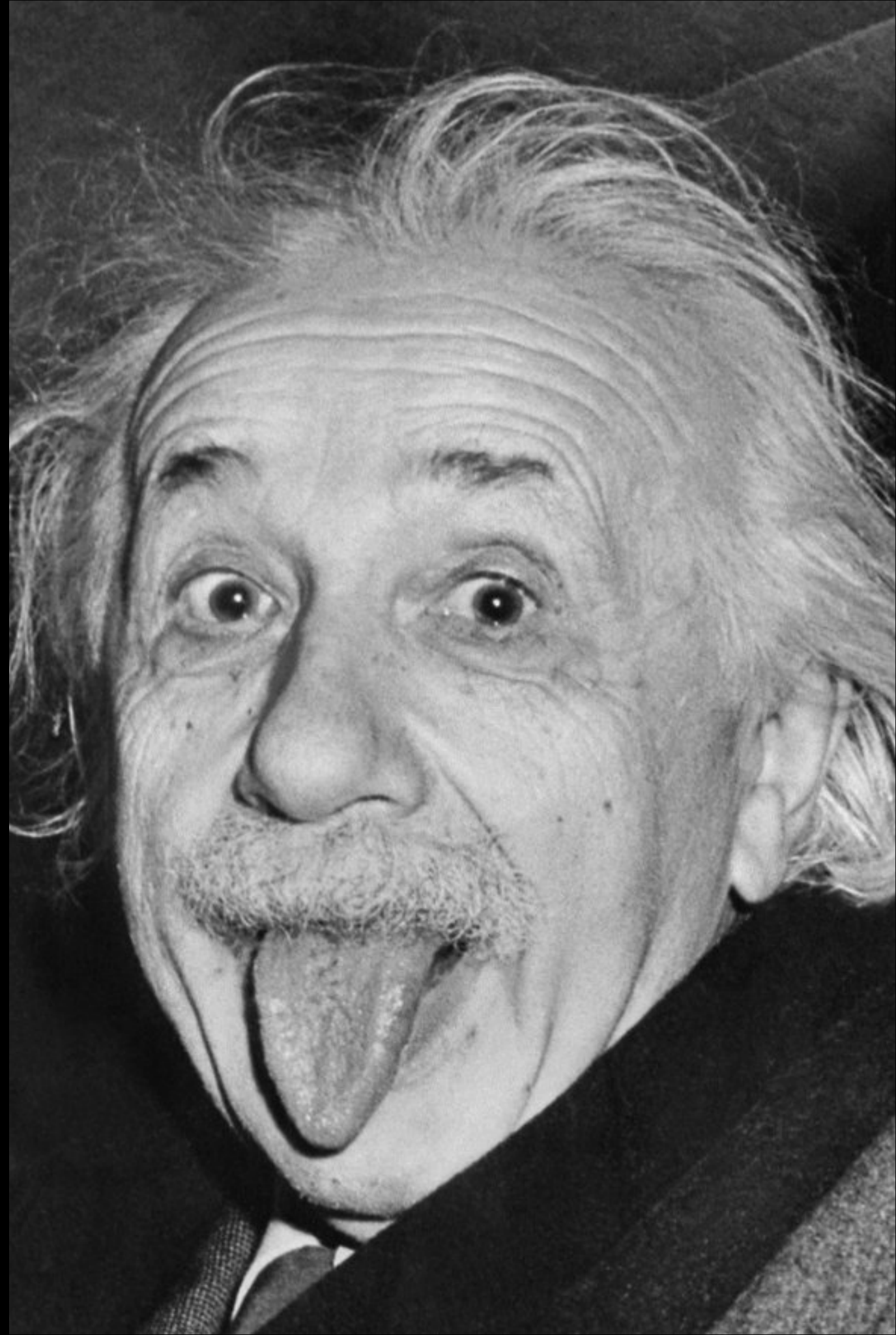
LONDON PARALYMPIC GAMES 2012

- He had the honour to open the Paralympic Games by ruminating about the origins of the universe.

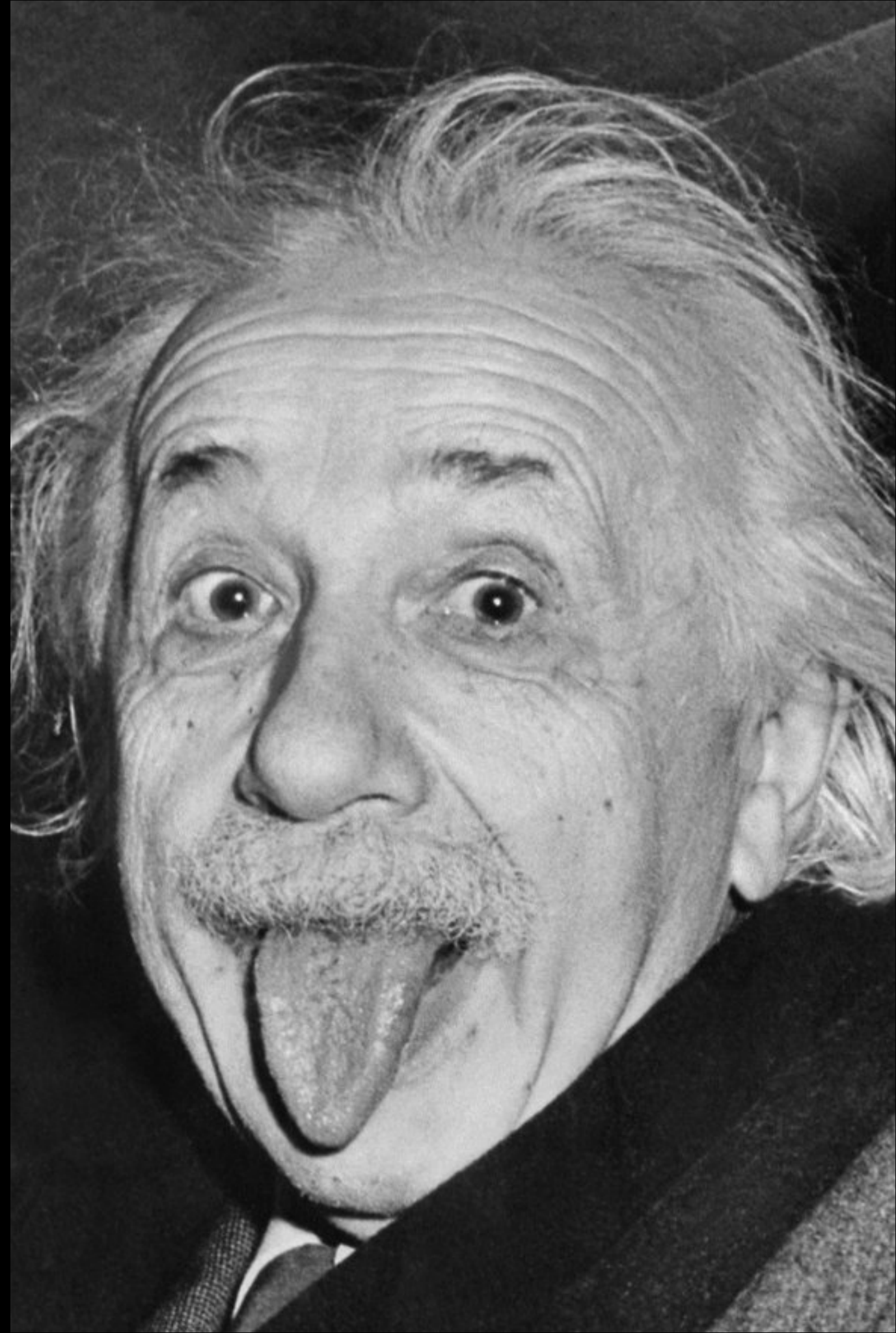


ALBERT EINSTEIN (1879-1955)

- "Insanity is doing the same thing, over and over again, but expecting different results."



- "Try not to become a man of success but rather to become a man of value."



ABOUT LEARNING PHYSICS

Values

1. Be diligent
2. Be prudent
3. Respect others/
have Integrity
4. Be simple

Problem-solving

1. Practise & practise
2. Apply scientific reasoning
3. Respect others' ideas /
have Integrity in learning
4. Neat, concise



LEARNING ATTITUDE

- Be Curious!
- Be Very Curious!



NEXT LESSON

- Read up on **Lenses** in Chapter 13 (from page 269) of **Textbook** "All about Physics".
- Read Chapter 8 **Lenses Notes** & do exercises
- Pop Quiz (2 - 5 marks)