

# Baker Street *Elementary*

PRESENTS  
"THE LIFE AND TIMES IN VICTORIAN LONDON"



# Baker Street *Elementary*

THE LIFE AND TIMES IN VICTORIAN LONDON  
# 130 - WRITTEN IN THE STARS - AUGUST, 2023



**WELCOME TO TOPIC NUMBER # 130... TODAY WE  
WILL BE LOOKING AT ASTRONOMY DURING THE  
VICTORIAN PERIOD.**



***IN A STUDY IN SCARLET, I PRONOUNCED YOUR KNOWLEDGE OF ASTRONOMY AS 'NIL,' AND WENT SO FAR AS TO DESCRIBE OUR DISCUSSION ABOUT YOUR DISINTEREST IN THE SOLAR SYSTEM.***



*'IF WE WENT ROUND THE MOON IT WOULD NOT  
MAKE A PENNYWORTH OF DIFFERENCE TO ME OR  
TO MY WORK,' YOU TOLD ME.*



LATER, YOU REAFFIRMED YOUR BELIEF ONLY CERTAIN SUBJECTS WERE WORTHY OF BEING STORED IN YOUR 'BRAIN ATTIC' IN 'THE ADVENTURE OF THE FIVE ORANGE PIPS.'



JOHN O'BRIEN, HOWEVER, SUGGESTED YOU DID KNOW SOMETHING OF THE SUBJECT BECAUSE YOU REFERENCED ASTRONOMERS AND THEIR USE OF 'THE PERSONAL EQUATION' IN CALCULATING THE SUN'S POSITION IN 'THE MUSGRAVE RITUAL;' DISCUSSED 'THE OBLIQUITY OF THE ECLIPTIC' IN 'THE GREEK INTERPRETER;' AND WAS FAMILIAR WITH MORIARTY'S TREATISE ON ASTEROIDS IN 'THE FINAL PROBLEM.'



**DESPITE MY EARLY OBSERVATION AND YOUR OWN  
ASSERTIONS REGARDING YOUR KNOWLEDGE OF THE  
TOPIC, YOU DID HAVE A GRASP OF THE OLDEST  
SCIENCE WHEN NEEDED.**





**ASTRONOMY WAS THE FIRST NATURAL SCIENCE TO  
REALIZE A HIGH LEVEL OF COMPLEXITY AND DID SO  
MORE THAN 4000 YEARS AGO.**



**THE BABYLONIANS, GREEKS, AND THOSE IN ISLAMIC COUNTRIES ALL BUILT UPON THE EARLIEST OBSERVATIONS OF THE MOVEMENTS AND POSITIONS OF THE SUN, MOON, PLANETS (VENUS WAS OBSERVED AS EARLY AS 2000 BCE), AND STARS.**



THOSE STUDYING THE HEAVENS WERE  
ABLE TO BUILD UPON EARLIER WORK  
BECAUSE THE SUBJECTS STUDIED  
REMAINED STABLE OVER MILLENNIA.



THEY COULD BE MATHEMATIZED AND PROVIDED RELIGIOUS AND PHILOSOPHICAL MEANINGS AS WELL AS USEFUL PREDICTIONS SUCH AS THE FLOODING OF THE NILE.



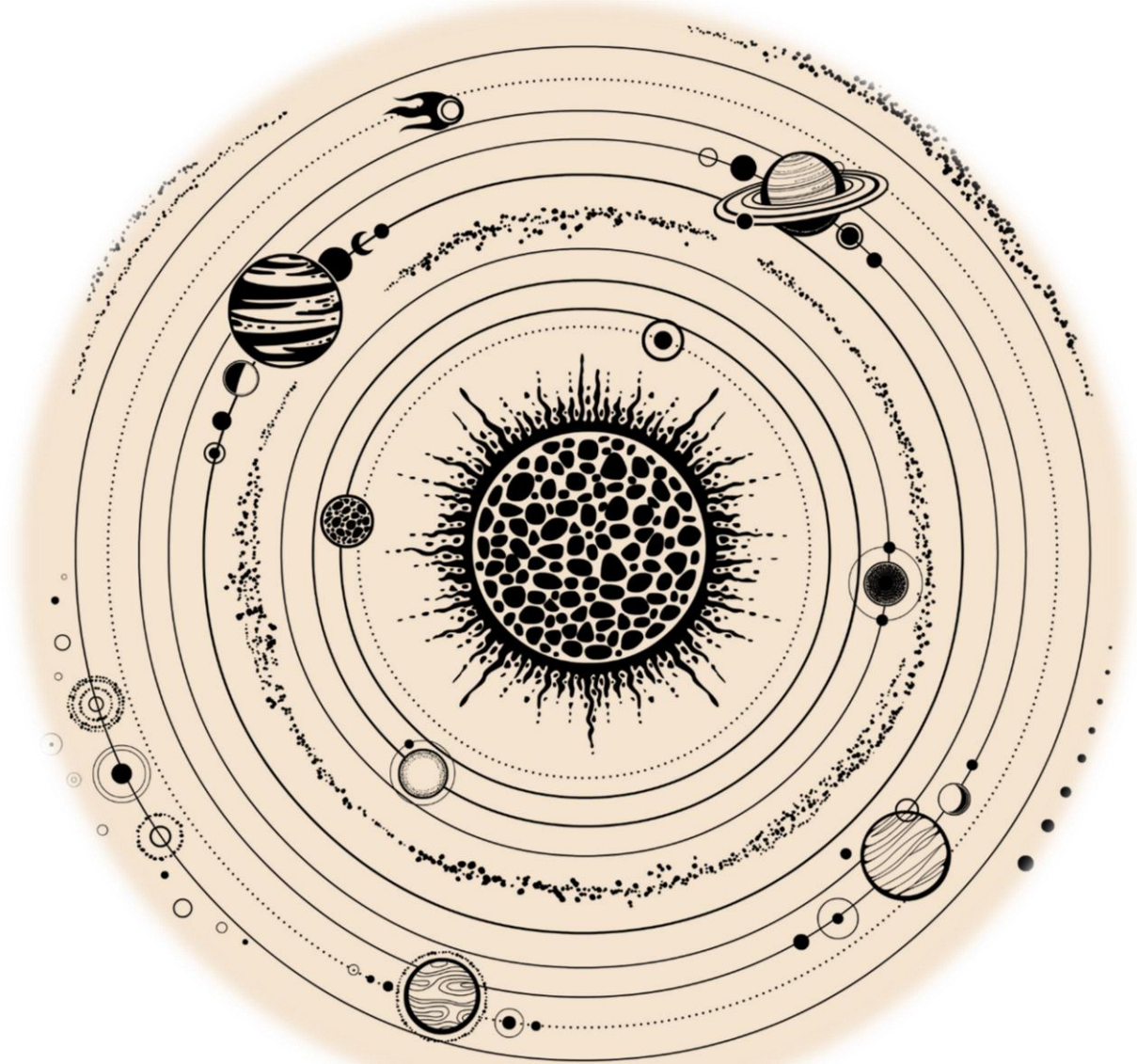
**WHILE ASTRONOMY PROGRESSED OUTSIDE OF EUROPE,  
THE STUDY LANGUISHED UNTIL 1175 WHEN THE  
ITALIAN GERARD OF CREMONA TRANSLATED CLAUDIUS  
PTOLEMY'S WORK ON THE STARS AND PLANETS' MOTION  
FROM ARABIC TO LATIN.**



**WITH THE CREATION OF UNIVERSITIES (SUCH AS OXFORD), THE TEACHING AND STUDY OF ASTRONOMY WERE INCLUDED AS PART OF THE CURRICULUM.**



**PTOLEMY'S GEOCENTRIC MODEL (WITH THE EARTH AS THE CENTER OF THE UNIVERSE) REMAINED THE ACCEPTED PARADIGM UNTIL NICOLAUS COPERNICUS PUBLISHED HIS HELIOCENTRIC (PLANETS REVOLVE AROUND THE SUN) THEORY IN 1543, SIMPLIFYING THE MOVEMENT OF THE PLANETS.**

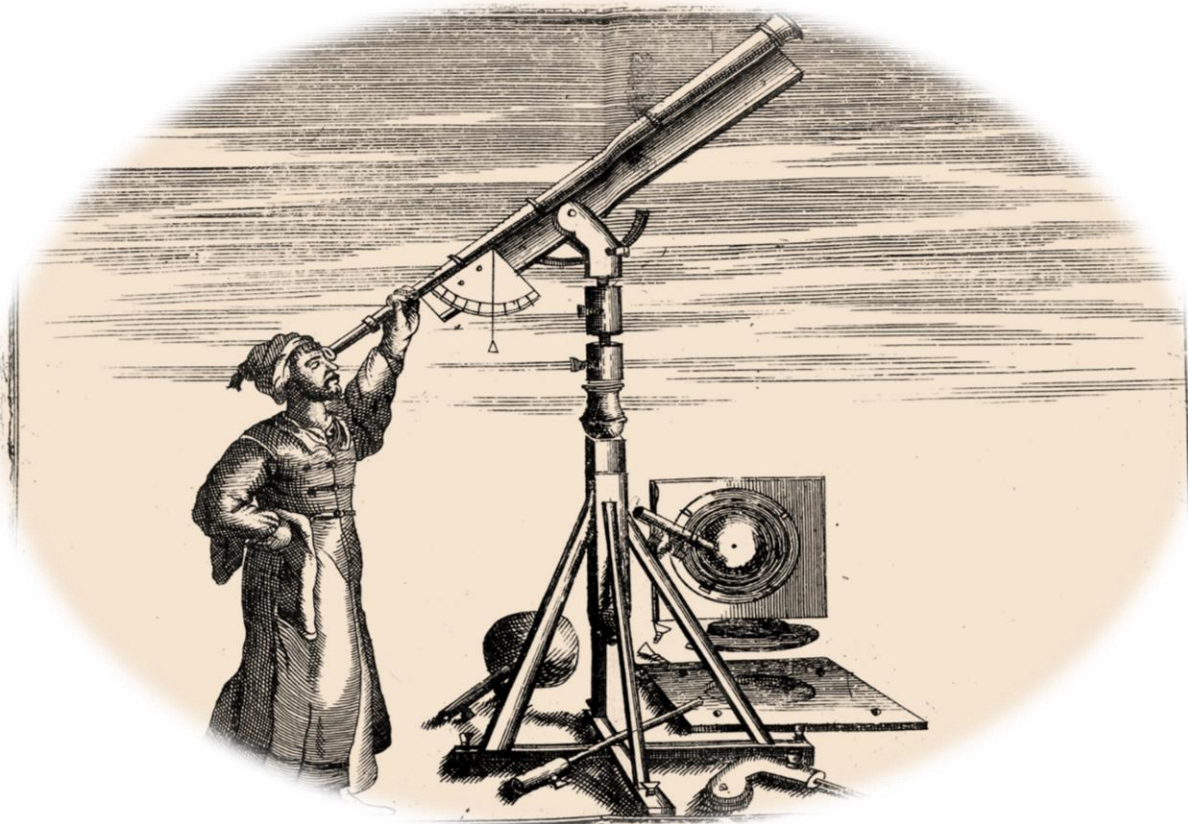


*HIS AND OTHER WORKS (INCLUDING GALILEO'S)  
WERE BANNED BY THE CHURCH AND ANOTHER 100  
YEARS PASSED BEFORE IT BECAME THE STANDARD  
CONCEPT OF THE UNIVERSE.*

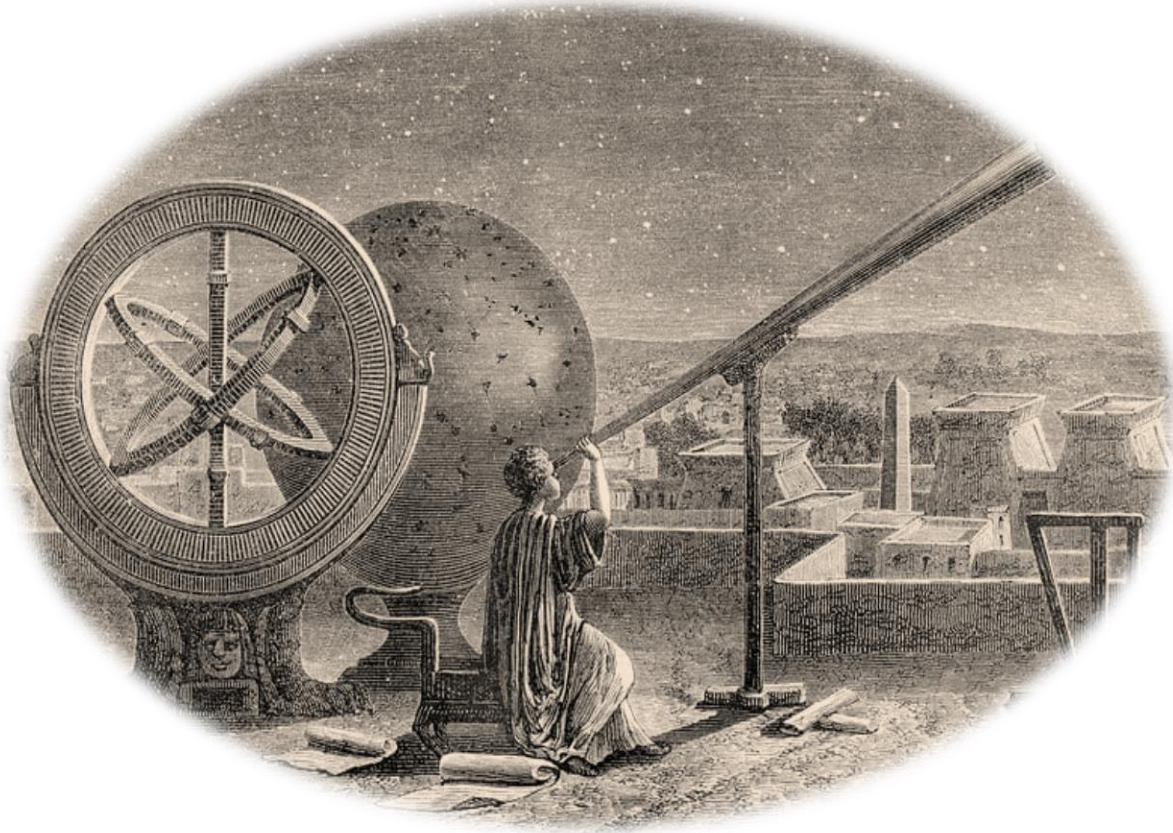




*GALILEO OWED HIS OBSERVATIONS OF THE STARS AND PLANETS TO A RATHER CRUDE TELESCOPE HE USED TO STUDY THE MOON'S GEOGRAPHY.*



**AS TELESCOPES BECAME MORE SOPHISTICATED,  
THE IDENTIFICATION OF ADDITIONAL PLANETS,  
THEIR MOONS, AND EVEN ASTEROIDS OCCURRED.  
THE FIRST ASTEROID WAS DISCOVERED IN 1801,  
WITH THREE MORE IDENTIFIED OVER THE NEXT  
SIX YEARS.**



**THE FIFTH WAS NOT FOUND FOR MORE THAN FORTY YEARS, BUT ASTRONOMERS MAPPED THE 100TH BY 1868.**



WHILE NO COPIES OF MORIARTY'S TREATISE  
REMAIN.. WILLIAM WALSH POSITS IT WAS BECAUSE  
THE CONTENTS WERE SO DISTURBING, THE BRITISH  
GOVERNMENT DESTROYED ALL COPIES..



**...SPECULATION AS TO ITS SUBJECT INVOLVED THE EXISTENCE OF ASTEROIDS IN AN AREA BETWEEN MARS AND JUPITER CREATED WHEN A PLANET IN THAT ORBIT WAS DESTROYED AND A POSSIBLE SIMILAR EVENT OCCURRING TO EARTH.**



IN ADDITION TO DISCOVERING FURTHER HEAVENLY BODIES AND MAPPING THEM... ASTROMETRICS... ASTRONOMERS IN VICTORIAN ENGLAND ALSO CONTRIBUTED TO ASTROPHYSICS—THE COMPOSITION AND MOVEMENT OF THOSE BODIES.



Department of Physics

UNIVERSITY OF OXFORD

# FRONTIERS OF ASTROPHYSICS

## AT OXFORD

Three circular portraits of astrophysicists are arranged horizontally. The first portrait is of Prof. Rob Fender, the second is of Prof. Jayne Birkby, and the third is of Prof. Pedro Ferréira. Each portrait is set against a dark, textured background that resembles a nebula or galaxy.

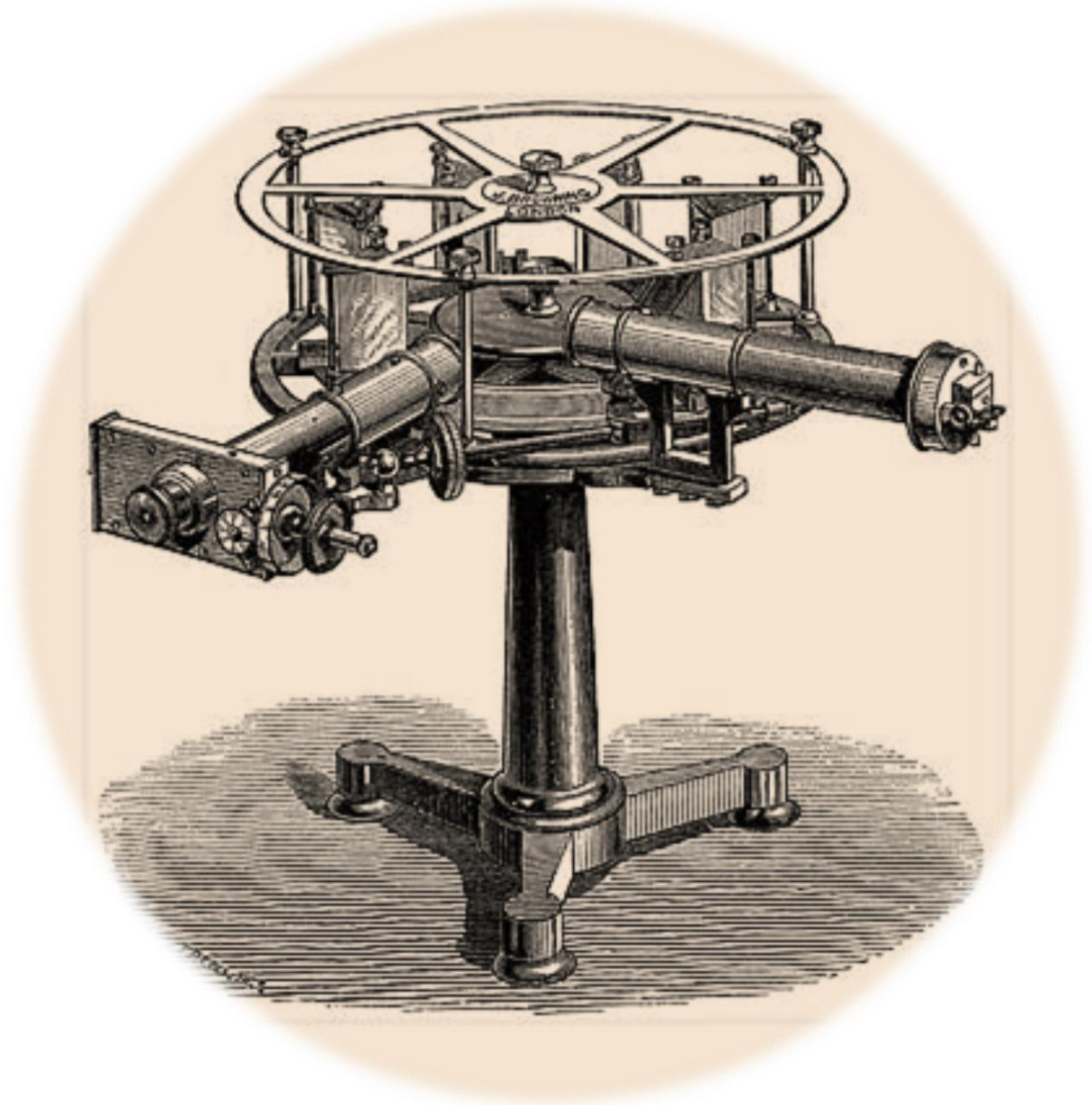
PROF ROB FENDER  
'BLACK HOLES IN THE UNIVERSE'

PROF JAYNE BIRKBY  
'TOWARDS OTHER EARTHS'

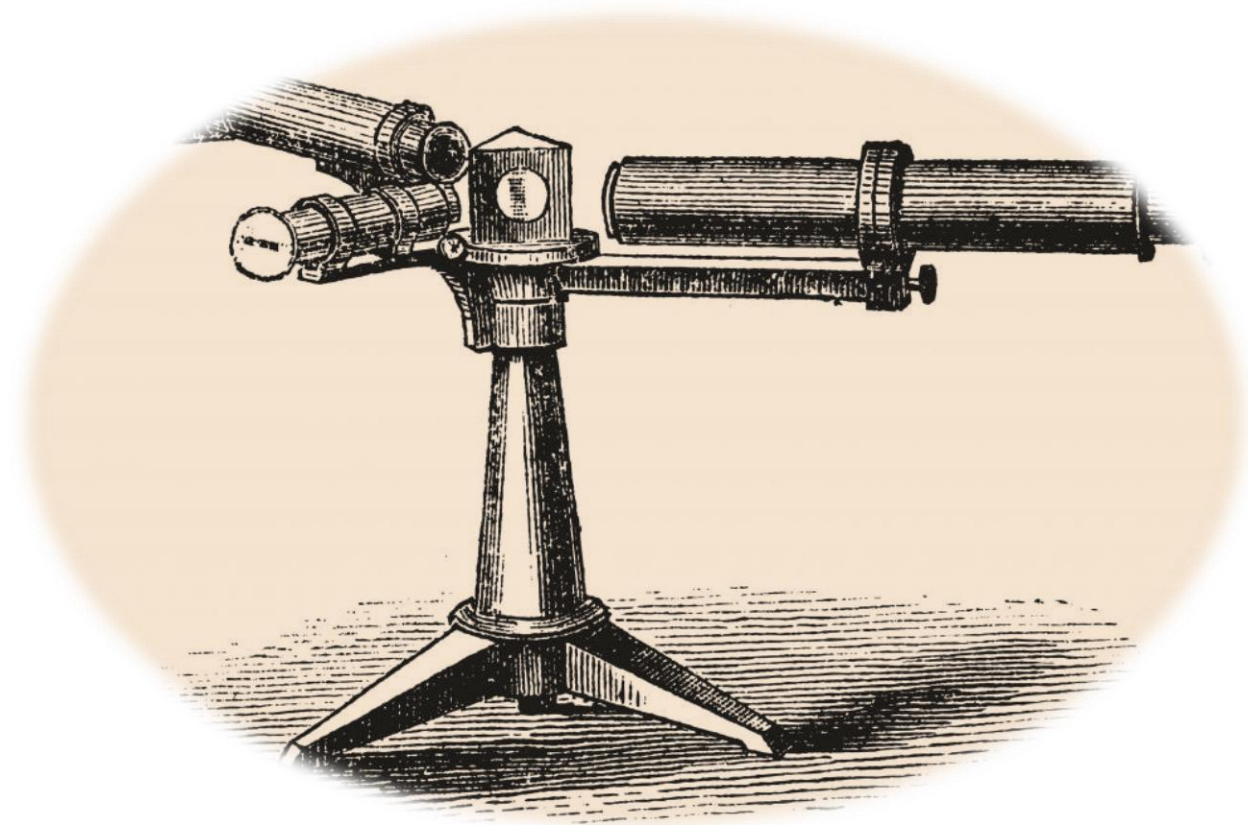
PROF PEDRO FERRÉIRA  
'THE COSMIC CHASM'

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*OF PARTICULAR IMPORTANCE TO THE DEVELOPMENT  
OF THIS FIELD WAS THE SPECTROSCOPE.*



USED FIRST TO ANALYZE THE CHEMICAL MAKEUP OF EARTH'S MATERIALS, ASTRONOMERS LATER EMPLOYED THE INSTRUMENT TO IDENTIFY THE SUN'S COMPOSITION THROUGH ITS SPECTRA.





*SUCH ADVANCES IN VICTORIAN TIMES WERE NOT  
LOST ON ME.*



**WHILE I MIGHT NOT HAVE BEEN AS CONCERNED WITH THE MATHEMATICAL COMPLEXITY AND STUDY OF ASTEROIDS AS MORIARTY ONCE SHOWED, I MUST HAVE FOUND THE TOPIC OF SOME VALUE AND ADDED PORTIONS TO MY BRAIN ATTIC FOR USE IN CERTAIN SITUATIONS.**



**SO, WE HAVE COMPLETED TOPIC # 130 IN OUR SERIES...**

**IN TOPIC # 131, WE WILL BE LOOKING AT PLUMBING DURING THE VICTORIAN PERIOD.**



## ORIGINAL SOURCE MATERIAL FOR FOR THIS TOPIC:

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"THE LIFE AND TIMES IN VICTORIAN LONDON"

IS CREATED THROUGH THE INGENUITY & HARD WORK OF:

JOE FAY

LIESE SHERWOOD-FABRE

RUSTY MASON &

STEVE MASON

