



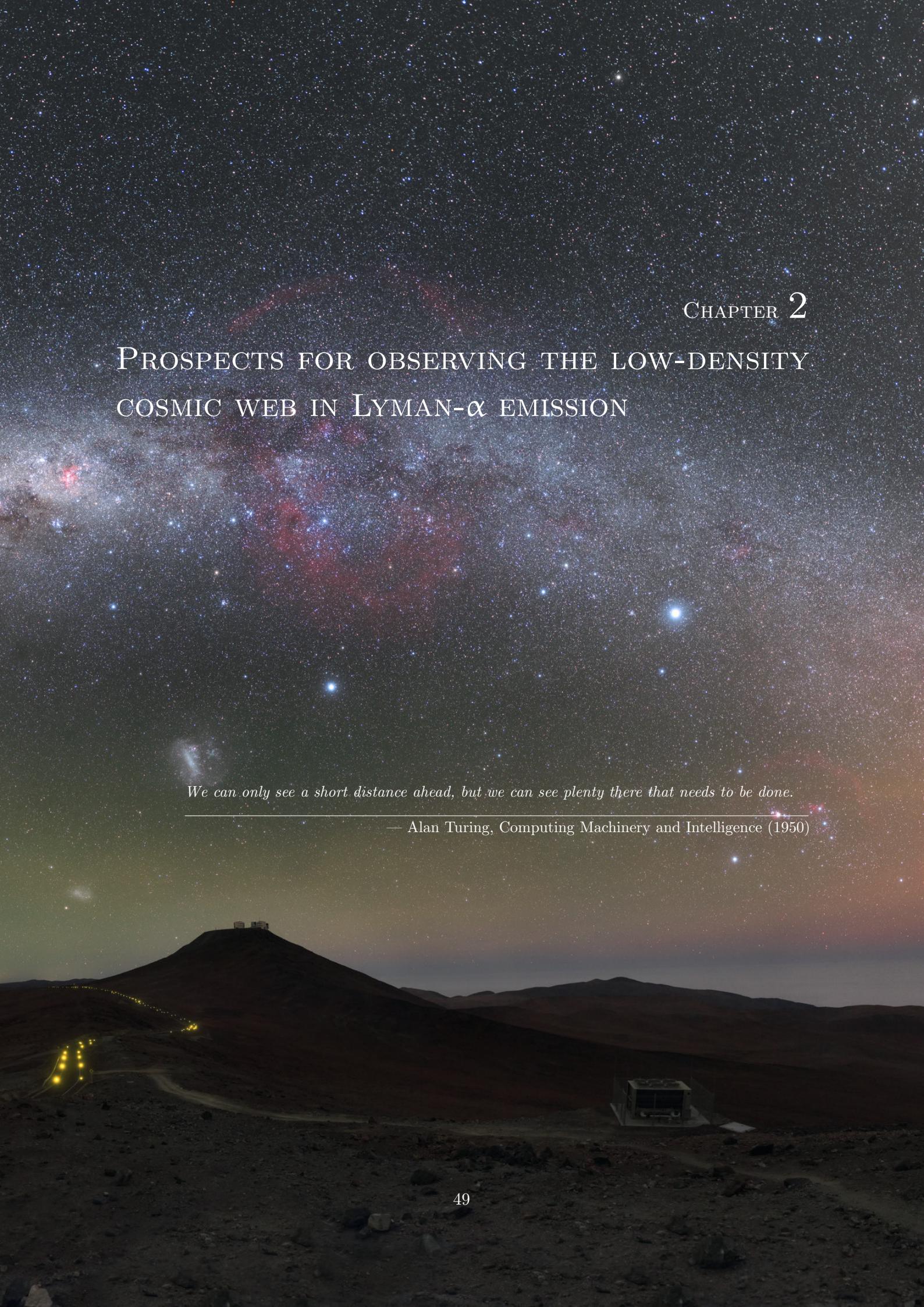
CHAPTER 1

INTRODUCTION

*Man muss noch Chaos in sich haben, um einen
tanzenden Stern gebären zu können.*

*You must have chaos within yourself to give birth to a
dancing star.*

— Friedrich Nietzsche, *Also sprach Zarathustra* (1883)



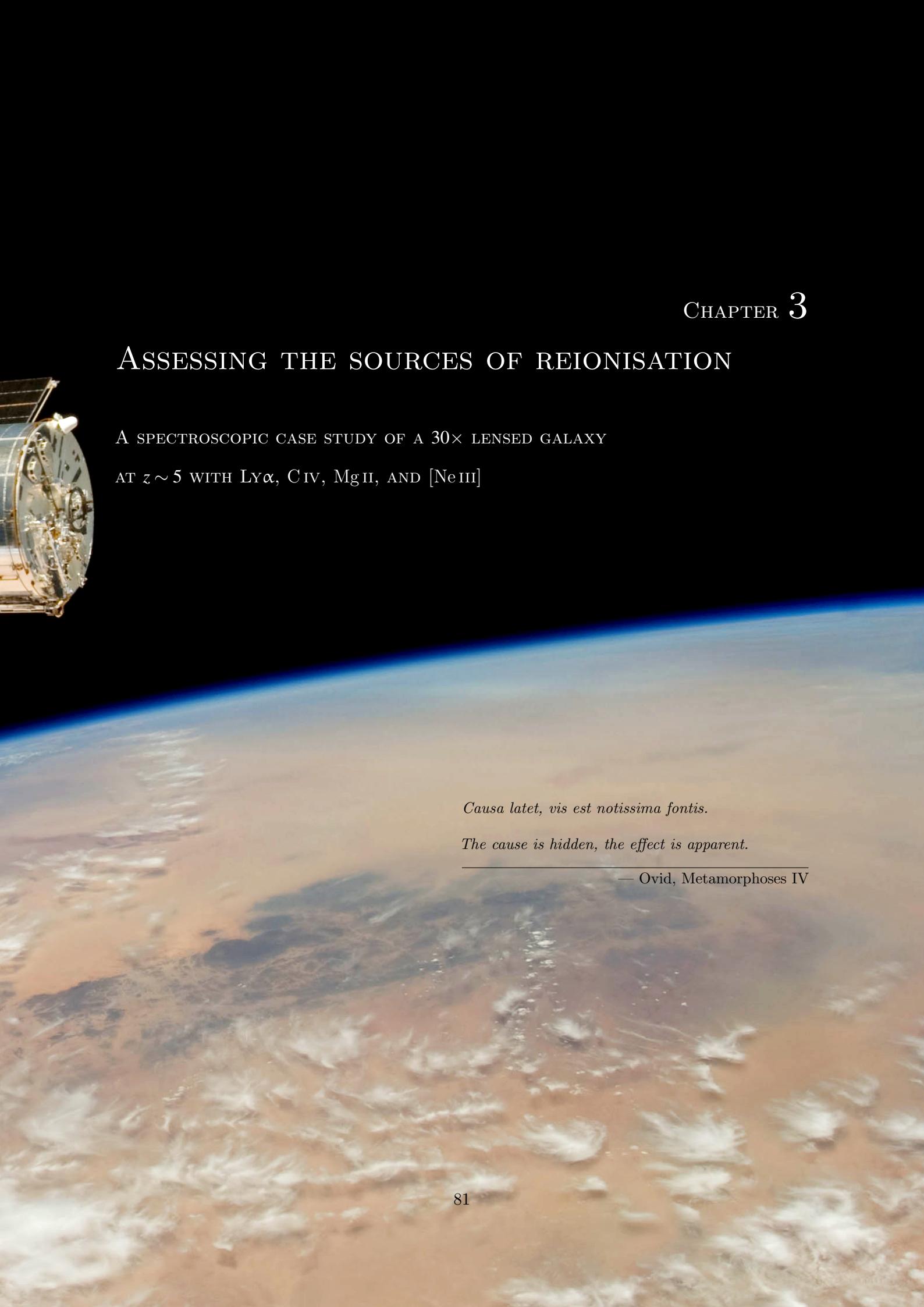
CHAPTER 2

PROSPECTS FOR OBSERVING THE LOW-DENSITY COSMIC WEB IN LYMAN- α EMISSION

We can only see a short distance ahead, but we can see plenty there that needs to be done.

— Alan Turing, Computing Machinery and Intelligence (1950)





CHAPTER 3

ASSESSING THE SOURCES OF REIONISATION

A SPECTROSCOPIC CASE STUDY OF A $30\times$ LENSED GALAXY

AT $z \sim 5$ WITH LY α , C IV, Mg II, AND [Ne III]

Causa latet, vis est notissima fontis.

The cause is hidden, the effect is apparent.

— Ovid, Metamorphoses IV

CHAPTER 4

DUAL CONSTRAINTS WITH ALMA

NEW [O III] 88 μm AND DUST-CONTINUUM OBSERVATIONS REVEAL
THE ISM CONDITIONS OF LUMINOUS LBGs AT $z \sim 7$

Pulvis et umbra sumus.

We are dust and shadow.

— Horace, Odes IV



The background of the entire page is a deep blue night sky filled with numerous stars of varying sizes and brightness. At the bottom of the frame, there is a prominent, textured nebula or cloud formation in shades of orange, yellow, and brown, with some darker regions and small white stars embedded within it.

CHAPTER 5

CONCLUSIONS AND OUTLOOK

*The Road goes ever on and on
Down from the door where it began.
Now far ahead the Road has gone,
And I must follow, if I can,
Pursuing it with eager feet,
Until it joins some larger way
Where many paths and errands meet.
And whither then? I cannot say.*

— J.R.R. Tolkien, The Fellowship of the Ring (1954)