

THE UNIVERSITY OF MANCHESTER
SCHOOL OF PHYSICS AND ASTRONOMY

— PHYS 40772 (M, A) —

Cosmology of the

Early Universe

A course taught at the University of Manchester as
part of the 4th year MPhys programme.

LECTURE NOTES

typeset by

Edoardo ALTAMURA

School of Physics and Astronomy

`edoardo.altamura@student.manchester.ac.uk`
`edoardo.altamura@hotmail.it`

Based on the lectures, notes and reference material given by
Dr. Fedor BEZRUKOV

Academic year: 2018-2019
4th year – Semester 8

Created: January 28, 2019
Last modified: March 8, 2019

Disclaimer

These notes are property of the University of Manchester and the author. Figures

Contents

- 1 Introduction** **3**
- 1.1 Relation to other courses 3

- 2 Cosmological perturbations and structure formation** **3**
- 2.1 Classical Jeans instability 3

1 Introduction

1.1 Relation to other courses

2 Cosmological perturbations and structure formation

2.1 Classical Jeans instability