

## 0.1 Background

### 0.1.1 The formation of stars and galaxies

Primordial matter

Gravitational collapse

Galaxies

Stars

### 0.1.2 Nuclear physics of stars

The nucleus

Write about the modern models for the nucleus

Interaction of nuclei

nuclear physics, nuclear physics experiments, cross-sections, density and temperature dependence

Production of heavy elements

Write about the neutron capture processes Make a new section here where I describe the application to stars and chemical production

### 0.1.3 Galactic chemical evolution

Start by piecing together the tiniest of nuclear physics with the galactic and stellar physics Typical history of chemical enrichment as a galaxy ages  
Write about models for chemical evolution, both one-zone and others

More subsections...

### 0.1.4 Cosmic clocks

I should probably start here!