

INTRODUCTION TO SPEECH SCIENCE

Week 4 – Vowels and Filters

Key points to understand

- How filters change the spectra of sources
- Simple resonators
- Frequency response graphs
- How resonances of the vocal tract change with length and shape
- How changes in resonances (i.e., formants) produce different vowels
- Types of variability found for vowels

Readings

Recommended:

Rosen and Howell, *Signals and Systems for Speech and Hearing*. Chapter 11.