

Reading Assignment and Suggestions(3)

1. Pagel Chapter 2
Iliadis Chapter 1

2. Atomic masses

Lecture 5 on the website includes pages from a text and gives an overview of current techniques for measuring masses.

A very concise introduction is given by Schatz & Blaum (2006, *europhysicsnews*, 37, No. 5)

-- <http://www.europhysicsnews.org/articles/epn/pdf/2006/05/epn06502.pdf>

An authoritative review of modern techniques is by K. Blaum (2006, *Physics Reports*. 425, 1).

For a review of experimental techniques AND theoretical approaches, especially those demanded for studies of the r-process see D. Lunney, J.M. Pearson & C. Thibault (2003, *Rev. Mod. Phys.* 75, 1021)

3. Atomic mass tables

An exercise of Atomic Mass Evaluations (AME) has been conducted for many years and at intervals of several years updated tables of masses and many related quantities are published.

The latest incarnation is AME2012 see <http://amdc.impcas.ac.cn/evaluation/masseval.html> and published in *Chinese Physics C* 36 for 2012.

After only a few minutes, I've not found an easy way to search AME2012 for particular quantities. If you find such a way, please let me know.

(If you find a website providing lists of new publications for atomic masses. Please let me know.)