

- **identify: identify spectral lines**

List possible lines in the specified energy range.

Syntax: **identify** <energy> <delta_energy> <redshift> <line_list>

The energy range searched is $\langle \text{energy} \rangle \pm \Delta \langle \text{energy} \rangle$ (keV) in the rest frame of the source. If working in wavelength mode, as set by the [setplot](#) command, then the <energy> and <delta energy> parameters should be entered as wavelengths (in Angstroms). <line list> specifies the list of lines to be searched. The options are `bearden`, which searches the Bearden compilation of fluorescence lines (Bearden, J.A., 1967, Rev.Mod.Phys. 39, 78), `mekal`, which uses the lines from the mekal model (q.v.) and `apec`, which uses the APEC <http://cxc.harvard.edu/atomdb> line list. The `apec` option takes an additional two arguments: the temperature of the plasma (keV) and a minimum emissivity of lines to be shown. If the command [xset](#) has been used to set `APECROOT` then `identify` uses the `APECROOT` value to define the new atomic physics data files. See the help on the `apec` model for details.