



pst-spectra

v 0.91

A. Schmittbuhl

November 25, 2006

Abstract

This extension, based on a NASA lines database, allows you to draw continuum, emission and absorption spectra. A Total of 16 880 visible lines from 99 elements can be displayed.

1 Options

Only one command exists, `\psspectrum`, with the following options.

Option	Type	Default	Description
<code>begin</code>	number	380	First wavelength, in nanometer
<code>end</code>	number	780	Last wavelength, in nanometer
<code>gamma</code>	number	0.8	Color correction
<code>brightness</code>	number	1	Brightness parameter of the CMYK color
<code>numlines</code>	number	250	Number of lines in a spectrum
<code>lines</code>	numbers		List of wavelengths, in nanometer
<code>element</code>	text		List of chemical elements or cations
<code>emission</code>	boolean	true	Emission spectrum
<code>absorption</code>	boolean	false	Absorption spectrum
<code>lwidth</code>	length	0.2	Width of each line (in PSTricks unit, not nanometer)
<code>lmin</code>	number	0	Between 0 and 1, to fix the intensity threshold.
<code>axe</code>	boolean	false	Draw an axis with a nanometric scale
<code>DI</code>	number	20	Nanometric length between two tics of the scale
<code>axecolor</code>	color	black	Color of the axis
<code>axewidth</code>	number	0.05	Width of the axis
<code>wlangle</code>	number	0	Angle, in degrees, of the wavelength numbers
<code>wlcmd</code>	commands	<code>{\small\sffamily\bfseries}</code>	Commands to be applied to the wavelength numbers

2 Examples

To get the headline

```
\psspectrum
\psspectrum[element=Fe]
\psspectrum[absorption,element=Fe2+]
```

Please have a look to the French documentation to experiment more complex examples.