## Spectral classification

International Virtual Observatory Alliance

**IVOA Documents** 



AN ENCODING SYSTEM TO REPRESENT STELLAR SPECTRAL CLASSES IN ARCHIVAL DATABASES AND CATALOGS

Version 1.03

IVOA Note 12 March 2009

Interest/Working Group:

http://www.ivoa.net/twiki/bin/view/IVOA/IvoaSemantics

Author(s):

Myron Smith, Randall W. Thompson, Richard O. Gray, Chris Corbally, Inga Kamp

Editor(s):

Myron Smith

## Scheme outline

- TT.tt.LL.PPPP
  - where T, t, L and P are digits [0..9]
- TT = main spectral type
- tt = subtype
- LL = luminosity class
- P<sub>1</sub>P<sub>2</sub>P<sub>3</sub>P<sub>4</sub>
  - P<sub>1</sub>P<sub>2</sub> global peculiarities
  - P<sub>3</sub>P<sub>4</sub> peculiarities depending on TT

## **Details**

- Anything unknown or not present = 0
- If composite object (P1=1)
  - P3P4 represent the spectral type of the secondary, if it is known

## **Examples**

- F5
  - 13.00.00.0000
- A3 IVn
  - 12.13.21.7000
- 07 IIIf
  - 10.17.23.0002
- SN la
  - 29.10.00.0000
- SC9/8 Tc
  - 26.19.00.0041