

### **ftest: calculate the F-statistic from two $\chi^2$ values**

Calculate the F-statistic and its probability given new and old values of  $\chi^2$  and number of degrees of freedom (DOF).

**Syntax:**      **fctest** chisq2 dof2 chisq1 dof1

The new  $\chi^2$  and DOF, chisq2 and dof2, should come from adding an extra model component to (or thawing a frozen parameter of) the model which gave chisq1 and dof1. If the F-test probability is low then it is reasonable to add the extra model component. **WARNING** : it is not correct to use the F-test statistic to test for the presence of a line (see Protassov et al 2002, ApJ 571, 545).