OVERVIEW OF THE SPFIT PROGRAM SET

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The SPFIT program can fit spectral lines for molecules with up to 99 vibronic states and up to 10 spins with a variety of different operators. The SPCAT program can predict the intensities and positions of such a molecule with a variety of electric and magnetic dipole matrix elements. SPFIT can accommodate blended lines and line frequencies in units of MHz and cm^{-1}. SPCAT produces a line list in JPL catalog format and can also produce an energy listing that includes the estimated uncertainty and fractional perturbation. I will give a brief description will be given of some of the algorithms used internally and will address some frequently asked questions about how to use the program.