

## **Time-dependent Fluorescence of Molecules in Comets**

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Molecules in cometary comae undergo fluorescence processes initially excited by sunlight before they are dissociated by solar ultraviolet radiation. Unless they have long lifetimes against the solar ultraviolet, time-dependent fluorescence calculations are necessary to analyze the spectra of molecules. Time-dependent models of several molecular bands will be presented. We also present high-resolution spectra of the AX and B-X bands of CH observed in recent comets, and compare the observations with the time-dependent models of the CH bands.