

$\sigma \rightarrow \sigma^*$ transition

An electronic transition described approximately as promotion of an electron from a 'bonding' σ orbital to an 'antibonding' σ orbital designated as σ^* . Such transitions generally involve high transition energies, and appear close to or mixed with Rydberg transitions.

Source:

PAC, 1996, 68, 2223 (*Glossary of terms used in photochemistry (IUPAC Recommendations 1996)*) on page 2279