

## THE $B^3\Sigma_u^- \leftarrow b^1\Sigma_g^+$ TRANSITION OF MOLECULAR OXYGEN

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The origin of the intensity of the  $B^3\Sigma_u^- \leftarrow b^1\Sigma_g^+$  transition of molecular oxygen, first observed recently by Eppink *et al.* [J. Chem. Phys. **108**, 1305 (1998).], is discussed. It is shown that the  $B \leftarrow b$  transition borrows its intensity principally from the dipole-allowed  $B \leftarrow X$  transition, through spin-orbit mixing between the  $X^3\Sigma_g^-$  and  $b^1\Sigma_g^+$  states. Estimated continuum photoabsorption cross sections and discrete oscillator strengths for the  $B \leftarrow b$  system are presented.