



Figure 19.3 (revised): The energy levels of the electron in the hydrogen atom. The leftmost column shows the 1s, 2s, and 2p levels in the absence of a magnetic field. The second column shows the levels that would be obtained if the spin did not exist but the magnetic field is present. The third column shows the levels when $B \neq 0$ and the spin is taken into account. The rightmost column gives the value of $m+2m_s$ for each energy level.