Observation or the $B_s$ Meson at the $\Upsilon(5S)$ VICTOR PAVLUNIN, Purdue University, CLEO COLLABORATION — Using the CLEO detector at the Cornell Electron Storage Ring, we have observed the $B_s$ meson in $e^+e^-$ annihilation at the $\Upsilon(5S)$ resonance. We have established that at the energy of the $\Upsilon(5S)$ resonance $B_s$ production proceeds predominantly through the creation of $B_s^*\bar{B}_s^*$ pairs. We find \[ \sigma(e^+e^- \rightarrow B_s^*\bar{B}_s^*) = [0.11^{+0.04}_{-0.03}\text{(stat.)} \pm 0.02\text{(syst.)}] \text{ nb}. \] The mass of the $B_s^*$ meson is measured to be \[ M_{B_s^*} = [5.414 \pm 0.001\text{(stat.)} \pm 0.003\text{(syst.)}] \text{ GeV}/c^2. \]