ATLAS Simulation Single lepton $\sqrt{s} = 8 \text{ TeV}, 20.3 \text{ fb}^{-1}$ $m_H = 125 \text{ GeV}$ 5 j, 2 b 5 j, 3 bS/B = 0.4%0.5 0.5 0.0 \geq 6 j, 3 b \geq 6 j, 2 b \geq 6 j, \geq 4 b 1.0 <u>m</u> 1.0 S/B = 4.0%S/B = 0.2%S/B = 1.0%0.5 0.5 0.5 0.0 0.0 0.0