NEUTRINO SENSITIVITY AND BACKGROUND REJECTION OF THE AUGER OBSERVATORY

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The Auger Observatory will be the largest air shower array ever built. This array of water Cherenkov pools offers the unique advantage of a large acceptance at very low zenith angle. Auger is therefore very well suited for studying horizontal air showers and in particular neutrino induced showers. In this short lecture the main characteristics of the acceptance will be given as well as the means by which neutrino induced showers can be disentangled from the large hadronic horizontal shower background. We will also present recent results on the possible detection of τ lepton induced showers from charged current ν_{τ} interactions in the ground surrounding the Auger array.