second fit parameter in our procedure. Note that this procedure is rather crude because different members of a stack may mix to varying degrees with other states. For example the $\eta(548)$ has 32% strangeness content while the η^{**} has 100%. In these cases we set γ_s by the strangeness content of the lightest member of the stack.

Height of Gaussian

The normalisation of the Gaussian tells us the relative multiplicities of the various hadrons in an event. An overall multiplicative factor κ sets the absolute number of each species and we fit this value. κ determines the total number of final state particles (before allowing for decays in transit to the detector), and hence we express it as the average hadron energy in the collision.

A Fourth Parameter

Our choice of holographic dual also contains a free parameter, R, which sets the 't Hooft coupling in the gravity dual. We fit it to the data. However, R is not in the same class as $\Lambda, \gamma_s, \kappa$. R has a sound theoretical background, and would not be present if the holographic dual to QCD was known.

Decay in transit

Once we have calculated the initial yield of hadrons, we then have to allow for decays of the particles in transit from the interaction point to the detector. Branching ratios are taken from [24], and particles that can be detected at LEP (whose results we will compare to) are set as stable. All the other particles are allowed to decay through the decay channels until they reach one of the stable particles. In this way we get a list of numbers which is what our model predicts would be seen at LEP.