ATLAS Internal
\( \sqrt{s} = 13 \text{ TeV}, 32.9 \text{ fb}^{-1} \)
Track-based, anti-\( k_t \), \( R = 0.8 \)
Soft Drop, \( z_{\text{cut}} = 0.1, \beta = 2 \)
Total Uncertainty

\begin{figure}
\centering
\includegraphics[width=\textwidth]{covariance_matrix}
\end{figure}

This figure shows the covariance matrix for particle-level \( r_g \) values. The color bar on the right indicates the covariance values, with darker colors representing higher covariances. The matrix highlights the relationships between different \( r_g \) values at the particle level.