3.2 more 1-loop divergences in QCD

\( \Rightarrow \) goal: evaluate 1-loop diagrams (again, in dim. reg. and Feynman gauge)

\[ \begin{align*}
&\int \frac{d^4 k}{(2\pi)^4} \left( \frac{i}{\Lambda^2} \right) \left( \frac{i}{(6\pi)^2} \right) \\
&\quad \times \left( \frac{\delta^2}{(2\pi)^2} \right) \left( \frac{\delta^2}{(6\pi)^2} \right) \\
&\quad \times \left( \frac{\delta^2}{(2\pi)^2} \right) \\
&\quad \times \left( \frac{\delta^2}{(6\pi)^2} \right)
\end{align*} \]
The page contains a complex mathematical expression involving integrals and series. The text includes a series expansion and integration over a range of variables. The notation and symbols suggest advanced mathematical concepts, possibly related to physics or engineering. The text is dense and requires a thorough understanding of mathematical analysis.
\[ \left( \frac{N_c}{(2\pi)^d} \right)^{\gamma} \frac{1}{\lambda} \frac{1}{2} \left[ \gamma^\nu \gamma^\mu \right] \]