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Precision determination of the strong coupling at the electroweak scale

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The ALPHA-collaboration computation
of the three-flavor Lambda-parameter and the determination of $\alpha(m_Z)$
consists of the steps:
Running from beyond the Z-mass to 4 GeV in the SF scheme,
matching to the GF scheme,
running from 4GeV to small energy in the GF scheme,
determining the smallest energy scale ($\approx$ 200 MeV) in
physical units with the help of the CLS simulations.
We summarize the first steps and discuss the last one in detail.
We then present our final result for $\Lambda^{(3)}_{\overline{\rm MS}}$ with its error budget.
Finally, the connection of the three-flavor theory to the five-flavor
$\alpha(m_Z)$ uses decoupling and high order perturbation theory in the $\overline{\rm MS}$ scheme.

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