

Some new (hep-lat/0601014) results from lattice calculations of quark masses.

TABLE 1. My summary of the status of lattice determinations of quark masses (in the $\overline{\text{MS}}$ renormalization scheme). For $\hat{m} \equiv (m_u + m_d)/2$ and m_s the results are presented at 2 GeV and for m_c, m_b , the results are presented at the mass itself ($\hat{m} \equiv \hat{m}(\hat{m})$). For comparison the values quoted by the PDG in 2004, using or excluding lattice simulations, are also presented.

Flavour	Best Lattice Values	PDG 2004 (Lattice)	PDG 2004 (Non-Lattice)
$\hat{m}(2\text{ GeV})$	$(3.8 \pm 0.8)\text{ MeV}$	$(4.2 \pm 1.0)\text{ MeV}$	$(1.5 < m_u(2\text{ GeV}) < 5)\text{ MeV}$ $(5 < m_d(2\text{ GeV}) < 9)\text{ MeV}$
$m_s(2\text{ GeV})$	$(95 \pm 20)\text{ MeV}$	$(105 \pm 25)\text{ MeV}$	80–155 MeV
\hat{m}_c	$(1.26 \pm 0.13 \pm 0.20)\text{ GeV}$	$(1.30 \pm 0.03 \pm 0.20)\text{ GeV}$	1–1.4 GeV
\hat{m}_b	$(4.2 \pm 0.1 \pm 0.1)\text{ GeV}$	$(4.26 \pm 0.15 \pm 0.15)\text{ GeV}$	4–4.5 GeV