

Table 1: The measurements that are the basis of our pMSSM prior $p^{\text{preCMS}}(\theta)$. All measurements except the measurement of m_h at the LHC were used to sample points from the pMSSM parameter space via Markov Chain Monte Carlo (MCMC). The m_h likelihood was imposed as a weight on the sampled points.

i	Observable $\mu_j(\theta)$	Constraint D_j^{preCMS}	Likelihood function $L(D_j^{\text{preCMS}} \mu_j(\theta))$	MCMC / post-MCMC
1	$BR(b \rightarrow s\gamma)$ [28, 29]	$(3.55 \pm 0.23^{\text{stat}} \pm 0.24^{\text{th}} \pm 0.09^{\text{sys}}) \times 10^{-4}$	Gaussian	MCMC
2a	$BR(B_s \rightarrow \mu\mu)$ [30]	observed CLs curve from [30]	$d(1 - CLs)/dx$	MCMC
2b	$BR(B_s \rightarrow \mu\mu)$ [31]	$3.2_{-1.2}^{+1.5} \times 10^{-9}$	2-sided Gaussian	post-MCMC
3	$R(B_u \rightarrow \tau\nu)$ [32]	1.63 ± 0.54	Gaussian	MCMC
4	Δa_μ [33]	$(26.1 \pm 8.0^{\text{exp}} \pm 10.0^{\text{th}}) \times 10^{-10}$	Gaussian	MCMC
5	m_t [34]	$173.3 \pm 0.5^{\text{stat}} \pm 1.3^{\text{sys}}$ (GeV)	Gaussian	MCMC
6	$m_b(m_b)$ [32]	$4.19_{-0.06}^{+0.18}$ GeV	Two-sided Gaussian	MCMC
7	$\alpha_s(M_Z)$ [32]	0.1184 ± 0.0007	Gaussian	MCMC
8a	m_h	pre-LHC: $m_h^{\text{low}} = 112$	1 if $m_h \geq m_h^{\text{low}}$ 0 if $m_h < m_h^{\text{low}}$	MCMC
8b	m_h	LHC: $m_h^{\text{low}} = 120, m_h^{\text{up}} = 130$	1 if $m_h^{\text{low}} \leq m_h \leq m_h^{\text{up}}$ 0 if $m_h < m_h^{\text{low}}$ or $m_h > m_h^{\text{up}}$	post-MCMC
9	sparticle masses	LEP [35] (via micrOMEGAs [24])	1 if allowed 0 if excluded	MCMC
10	prompt $\tilde{\chi}_1^\pm$	$c\tau(\tilde{\chi}_1^\pm) < 10$ mm	1 if allowed 0 if excluded	post-MCMC