**Table 28.1** The parameters of the current concordance cosmology. The contribution of the *i*-th constituent of the overall energy density is measured by  $\Omega_i$ , in units where the critical density corresponding to a spatially flat universe is unity. All current observations are consistent with flatness, so  $\Omega_b + \Omega_{CDM} + \Omega_A \equiv 1$ , and there are thus just six free parameters. The labels  $A_s$  and  $n_s$  define the primordial scalar or density perturbations, parameterized by Eq. (

$Ω_b$ Baryon fractionBaryogenesis $0.0462 \pm 0.0015$ $Ω_{CDM}$ Dark matterTeV scale physics (?) $0.233 \pm 0.013$ $Ω_A$ Dark energyQuantum gravity (?) $0.721 \pm 0.015$ $τ$ Optical depthFirst stars $0.084 \pm 0.016$ hHubble parameterCosmological epoch $0.701 \pm 0.013$ $A_s$ AmplitudeInflation $(2.45 \pm 0.09) \times 10^{-10}$ $n_a$ Spectral indexInflation $0.960 \pm 0.014$	10 <sup>-9</sup>