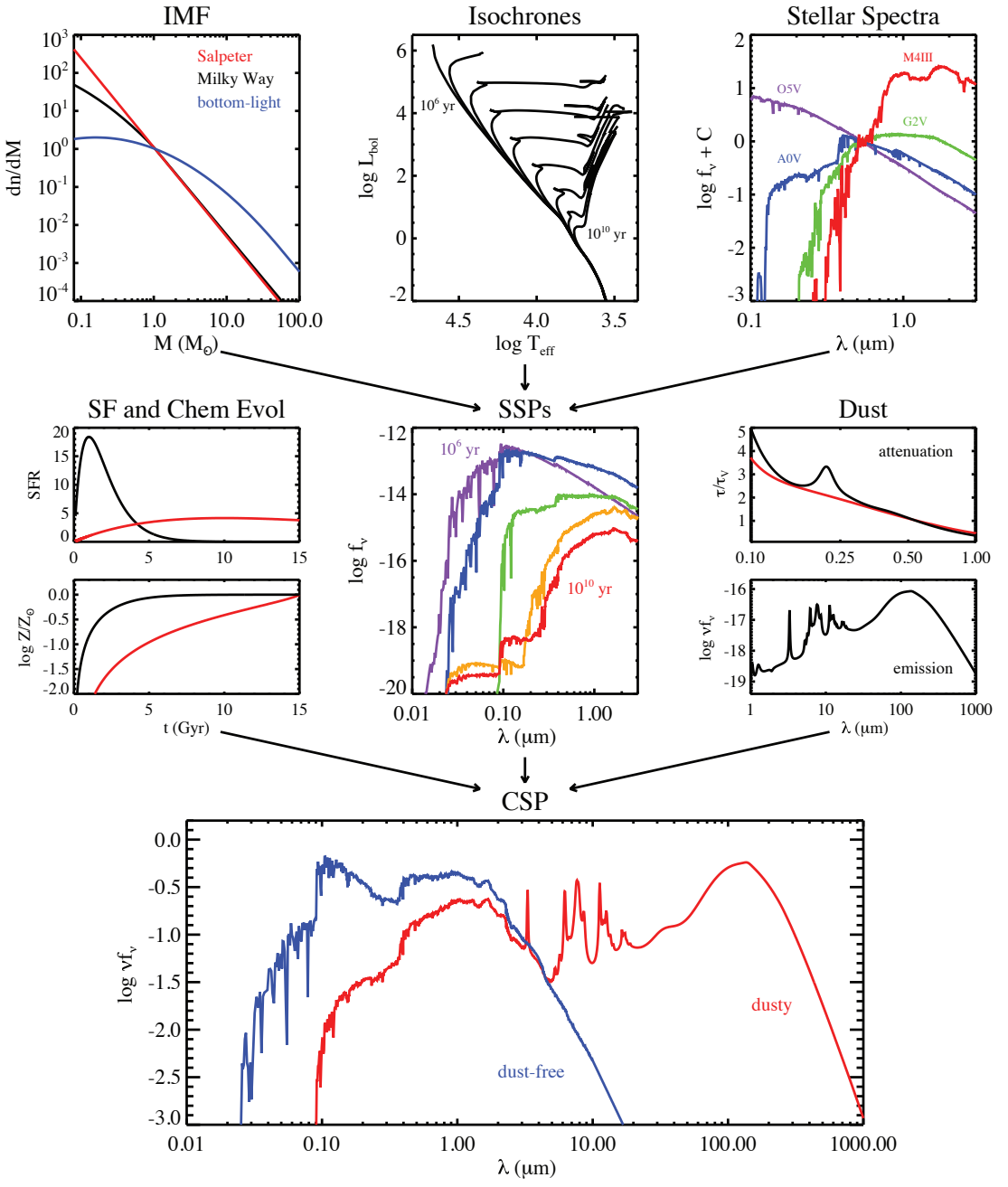
IMF
Salpeter
Milky Way
bottom-light
dn/dM
M (M⊙)
Isochrones
10^6 yr
10^10 yr
log L_bol
log T_eff
Stellar Spectra
M4III
O5V
G2V
A0V
log f_ν + C
λ (μm)
SSPs
SF and Chem Evol
SFR
log Z/Z⊙
t (Gyr)
10^6 yr
10^10 yr
log f_ν
λ (μm)
Dust
attenuation
τ/τ_V
emission
log νf_ν
λ (μm)
CSP
dusty
dust-free
log νf_ν
λ (μm)

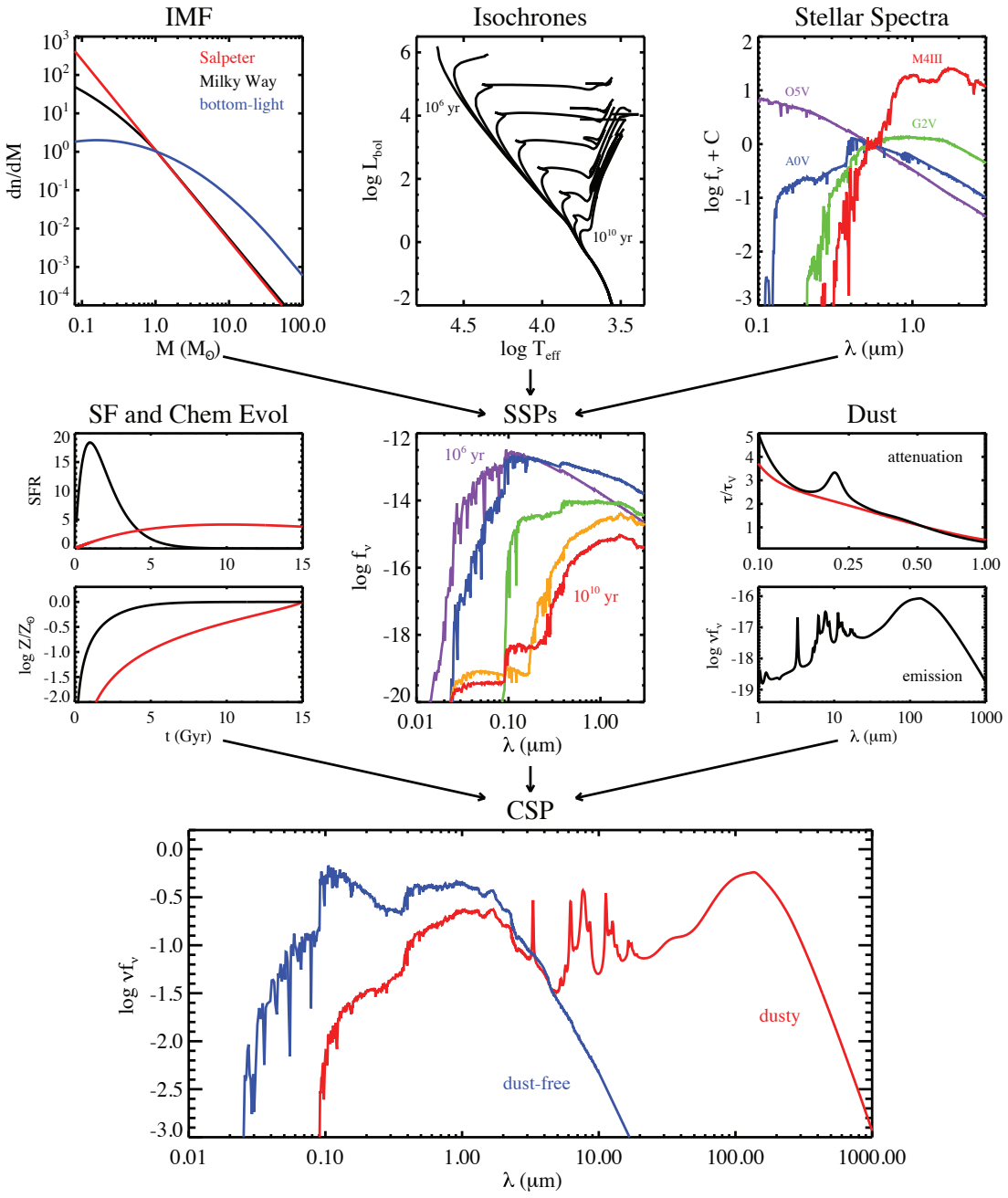

Figure 1:

Overview of the stellar population synthesis technique. Th e upper panels highlight the ingredients necessary for constructing simple stellar populations (SS Ps): an IMF, isochrones for a range of ages and metallicities, and stellar spectra spanning a rang e of T_{eff}, L_{bol}, and metallicity. The middle panels highlight the ingredients necessary for cons tructing composite stellar populations (CSPs): star formation histories and chemical evolution, S SPs, and a model for dust attenuation and emission. The bottom row shows the final CSPs both before a nd after a dust model is applied.