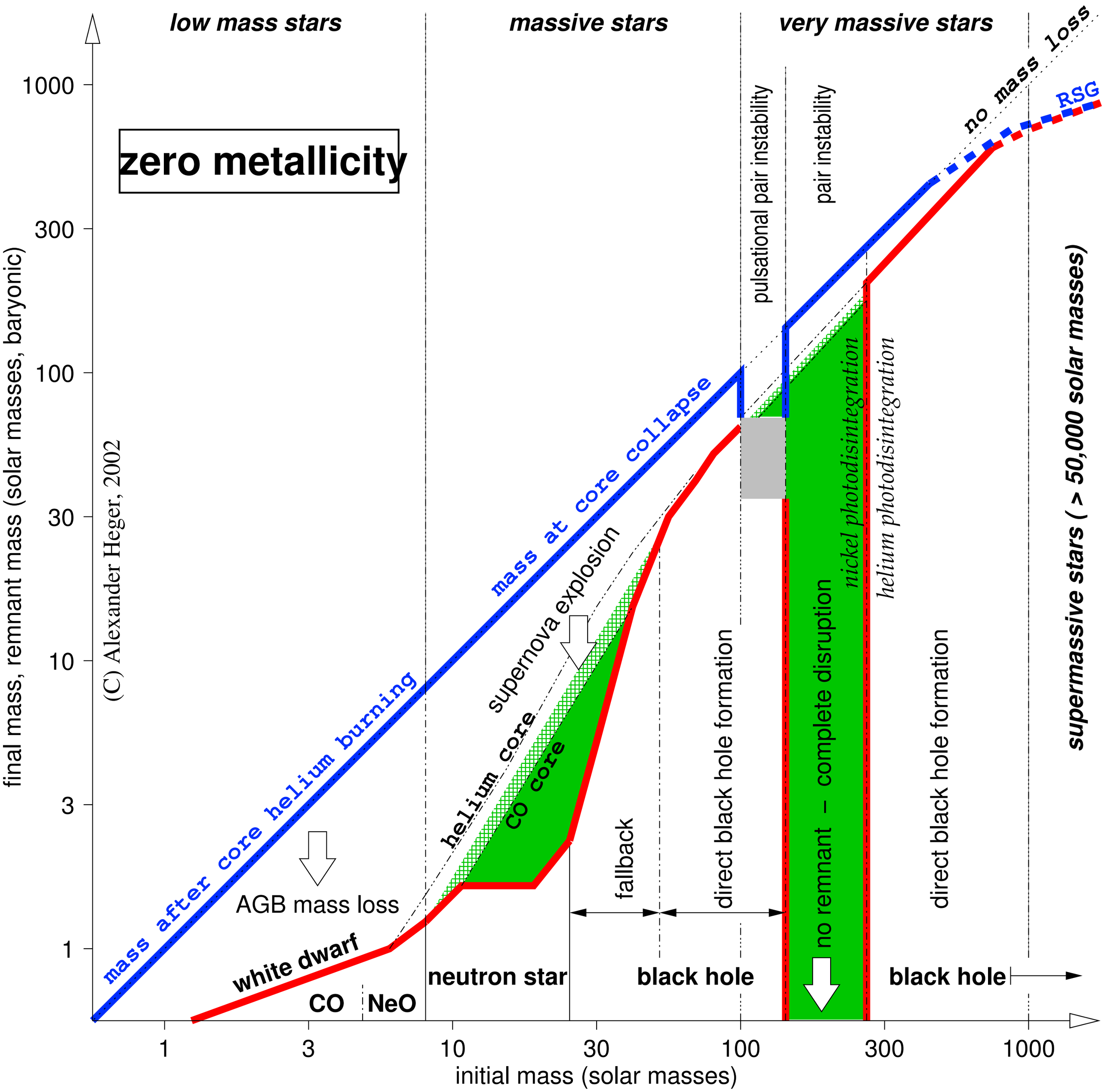
low mass stars
massive stars
very massive stars
zero metallicity
(C) Alexander Heger, 2002
final mass, remnant mass (solar masses, baryonic)
initial mass (solar masses)
1000
300
100
30
10
3
1
1
3
10
30
100
300
1000
mass after core helium burning
mass at core collapse
no mass loss
RSG
supernova explosion
helium core
CO core
AGB mass loss
white dwarf
CO
NeO
neutron star
black hole
fallback
direct black hole formation
pulsational pair instability
pair instability
nickel photodisintegration
helium photodisintegration
no remnant – complete disruption
direct black hole formation
black hole
supermassive stars (> 50,000 solar masses)