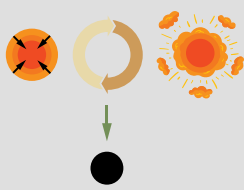












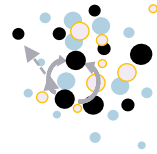







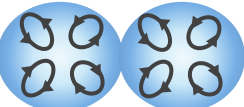






Channel	Shape of $m_1$ function			mass ratio $q$	Effective spin $\chi_{\text{eff}}$	$q - \chi_{\text{eff}}$ relation	$z$ evolution
	(shallow) rise	peak at 34	Sharp drop	equal mass	$\langle \chi_{\text{eff}} \rangle \approx 0.1$	unconfirmed	with SFR
<b>P-PISN</b>  <div> I) Pile up  II) shoulder  III) CCSN-transition </div>							
							
							
<b>Globular clusters</b> 							
<b>Hierarchical</b> 							
<b>Chemically Homogeneous</b>  <div> I) pure  II) quasi </div>							
							
<b>Pop III</b> 