

Supplementary material:  
Depletion, melting and reentrant solidification  
in mixtures of soft and hard colloids

Daniela Marzi, Barbara Capone, John Marakis,  
Maria Consiglia Merola, Domenico Truzzolillo, Luca Cipelletti,  
Firmin Moingeon, Mario Gauthier, Dimitris Vlassopoulos,  
Christos N. Likos, and Manuel Camargo

## SLS/DLS results

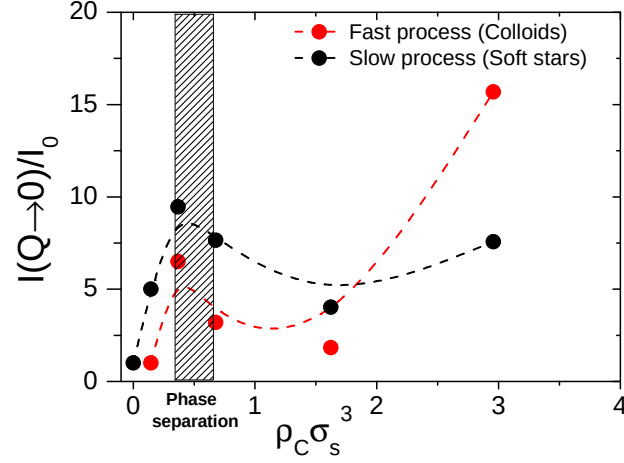


Figure SM1: Normalized scattered intensity extrapolated at  $Q = 0$  for the slow and fast processes in HS-star mixtures at  $\rho_S \sigma_S^3 = 0.126$ . Here  $I_0$  is the intensity measured in absence of HS. Dashed lines are guides to the eye.

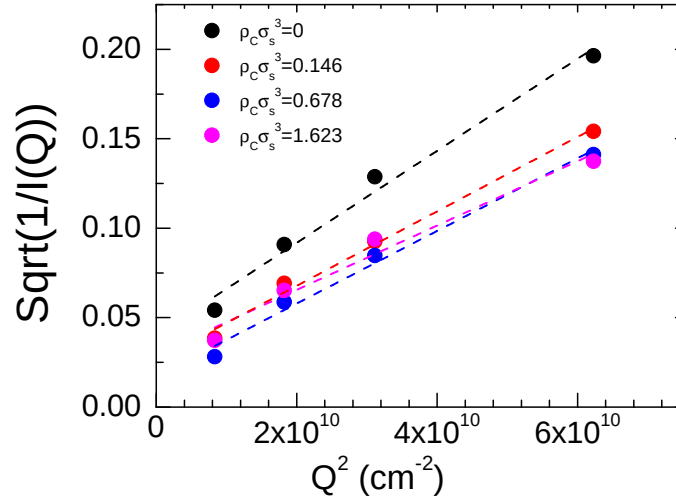


Figure SM2: Inverse square root of the slow process intensity  $1/\sqrt{I(Q)}$  vs  $Q^2$  for  $\rho_S \sigma_S^3 = 0.126$  and different hard colloid densities. Dashed lines represent linear fits. The intercept and the slope of the linear regressions are  $1/\sqrt{I(0)}$  and  $\xi^2/\sqrt{I(0)}$ , respectively.

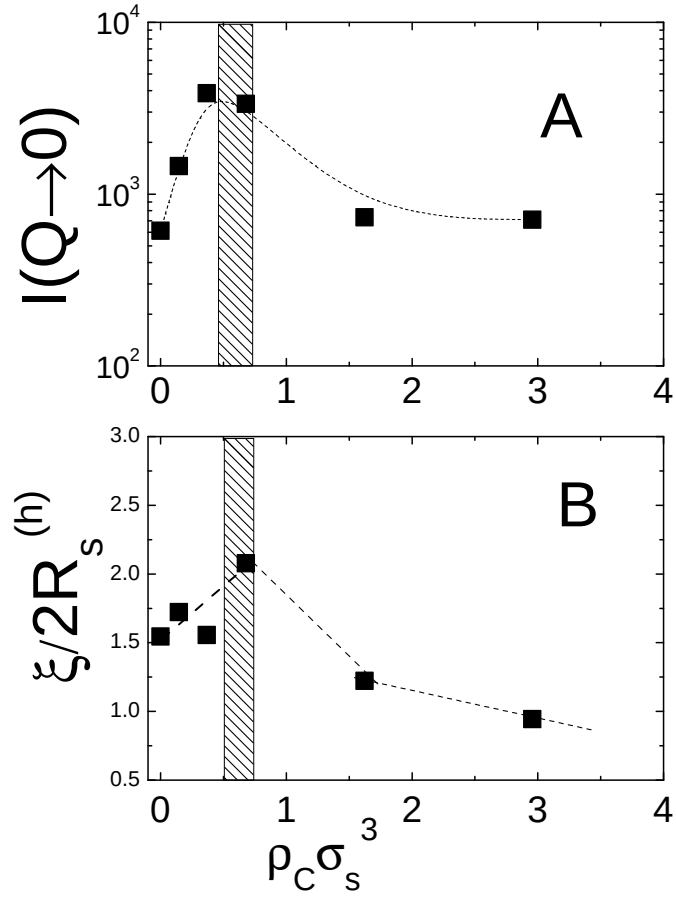


Figure SM3: Results of the fits described in Fig. SM2. Scattered intensity at zero wavevector  $I(0)$  (Panel A) and normalized correlation length  $\xi$  (Panel B) for  $\rho_S \sigma_S^3 = 0.126$ .

## Rheology

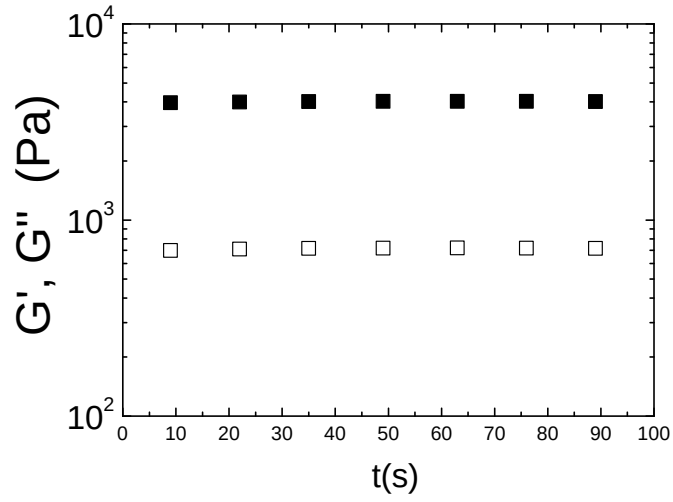


Figure SM4: Rejuvenation protocol employed for the rheological characterization of the mixture at  $\rho_S \sigma_S^3 = 0.343$  and  $\rho_H \sigma_S^3 = 15.013$ . The time sweep has been performed at constant shear amplitude  $\gamma_0 = 200\%$  and frequency  $\omega = 1$  rad/s.