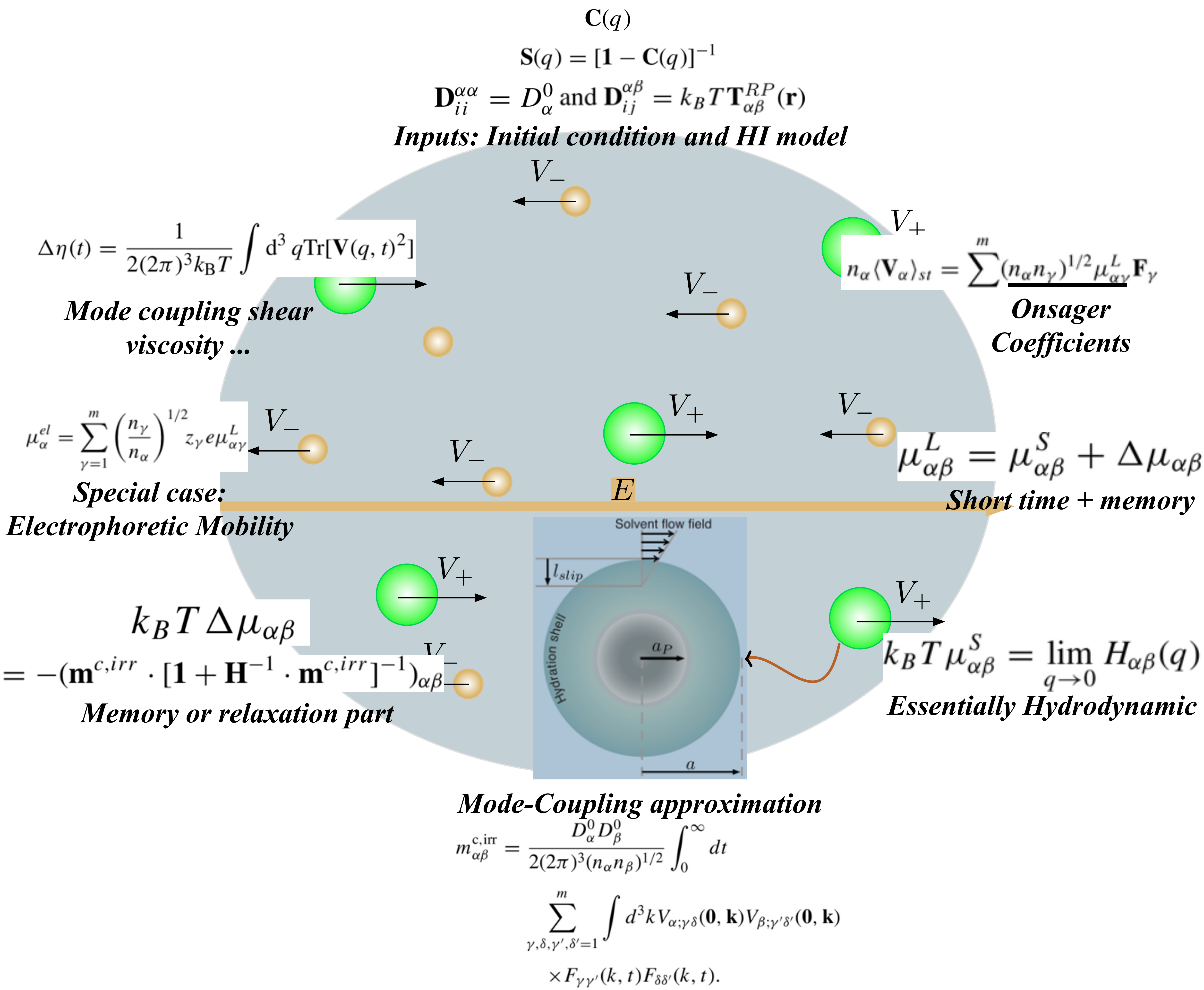

$\mathbf{C}(q)$
$\mathbf{S}(q) = [\mathbf{1} - \mathbf{C}(q)]^{-1}$
$\mathbf{D}_{ii}^{\alpha\alpha} = D_\alpha^0$ and $\mathbf{D}_{ij}^{\alpha\beta} = k_B T \mathbf{T}_{\alpha\beta}^{RP}(\mathbf{r})$
Inputs: Initial condition and HI model
V_-
V_+
$\Delta\eta(t) = \frac{1}{2(2\pi)^3 k_B T} \int d^3 q \mathrm{Tr}[\mathbf{V}(q,t)^2]$
Mode coupling shear viscosity ...
$n_\alpha \langle \mathbf{V}_\alpha \rangle_{st} = \sum^{m} \underline{(n_\alpha n_\gamma)^{1/2} \mu_{\alpha\gamma}^L} \mathbf{F}_\gamma$
Onsager Coefficients
$\mu_\alpha^{el} = \sum_{\gamma=1}^{m} \left(\frac{n_\gamma}{n_\alpha}\right)^{1/2} z_\gamma e \mu_{\alpha\gamma}^L$
Special case: Electrophoretic Mobility
$\mu_{\alpha\beta}^L = \mu_{\alpha\beta}^S + \Delta\mu_{\alpha\beta}$
Short time + memory
E
Solvent flow field
l_{slip}
Hydration shell
a_P
a
$k_B T \Delta\mu_{\alpha\beta} = -(\mathbf{m}^{c,irr} \cdot [\mathbf{1} + \mathbf{H}^{-1} \cdot \mathbf{m}^{c,irr}]^{-1})_{\alpha\beta}$
Memory or relaxation part
$k_B T \mu_{\alpha\beta}^S = \lim_{q \to 0} H_{\alpha\beta}(q)$
Essentially Hydrodynamic
Mode-Coupling approximation
$m_{\alpha\beta}^{c,\mathrm{irr}} = \frac{D_\alpha^0 D_\beta^0}{2(2\pi)^3 (n_\alpha n_\beta)^{1/2}} \int_0^\infty dt \sum_{\gamma,\delta,\gamma',\delta'=1}^{m} \int d^3k V_{\alpha;\gamma\delta}(\mathbf{0},\mathbf{k}) V_{\beta;\gamma'\delta'}(\mathbf{0},\mathbf{k}) \times F_{\gamma\gamma'}(k,t) F_{\delta\delta'}(k,t).$