$$D_i^a t_i^a = f_i^a + I_e^a t_i^e - I'^m_i t_m^a + I_e^m(2t_{mi}^{ea} - t_{im}^{ea}) + t_m^e(2v_{ei}^{ma} - v_{ei}^{am}) \\ v_{ei}^{mn}(2t_{mn}^{ea} - t_{mn}^{ae}) + v_{ef}^{ma}(2t_{mi}^{ef} - t_{im}^{ef}) \tag{1}$$

$$D_{ij}^{ab} t_{ij}^{ab} = v_{ij} + P(ia/jb)[t_{ij}^{ae} I_e^b - t_{im}^{ab} I_j^m + \frac{1}{2} v_{ef}^{ab} c_{ij}^{ef} + \frac{1}{2} c_{mn}^{ab} I_{ij}^{mn} \\ - t_{mj}^{ae} I_{ie}^{mb} - I_{ie}^{ma} t_{mj}^{eb} + (2t_{mi}^{ea} - t_{im}^{ea}) I_{ej}^{mb} + t_i^e I'^{ab}_{ej} - t_m^a I'^{mb}_{ij}] \tag{2}$$

$$I_a^i = f_a^i + 2v_{ae}^{im} t_m^e - v_{ea}^{im} t_m^e \tag{3}$$

$$I_b^a = (1 - \lambda_a^b) f_b^a + (2v_{be}^{am} t_m^e - v_{be}^{ma} t_m^e) - (2v_{eb}^{mn} c_{mn}^{ea} - v_{be}^{mn} c_{mn}^{ea}) - t_m^a f_b^m \tag{4}$$

$$I_j^i = I_j'^i + I_e^i t_j^e \tag{5}$$

$$I_j'^i = (1 - \lambda_j^i) f_j^i + (2v_{je}^{im} t_m^e - v_{ej}^{im} t_m^e) + (2v_{ef}^{mi} t_{mj}^{ef} - v_{ef}^{im} t_{mj}^{ef}) \tag{6}$$

$$I_{kl}^{ij} = v_{kl}^{ij} + v_{ef}^{ij} c_{kl}^{ef} + P(ik/jl) t_k^e v_{el}^{ij} \tag{7}$$

$$I_{jb}^{ia} = v_{jb}^{ia} - \frac{1}{2} v_{eb}^{im} c_{jm}^{ea} - v_{jb}^{im} t_m^a + v_{eb}^{ia} t_j^e \tag{8}$$

$$I'^{ab}_{ci} = v_{ci}^{ab} - v_{ci}^{am} t_m^b - t_m^a v_{ci}^{mb} \tag{9}$$

$$I'^{ia}_{jk} = v_{jk}^{ia} + v_{ef}^{ia} t_{jk}^{ef} + t_j^e t_k^f v_{ef}^{ia} \tag{10}$$