Equation assignment sequence for variable H

no	var	equ	quations	token
99	9	-	$S_{I,p}$ :: port variable	
98	4	-	${F^{sink}}_{N,I}$ :: port variable	
97	198	-	${K^o}_K$ :: port variable	
96	197	-	${E^a}_K$ :: port variable	
95	26	-	$N_{S,K}$ :: port variable	
94	19	-	$A_{N,p,q}$ :: port variable	
93	10	-	$S_{I,q}$ :: port variable	
92	3	-	${F^{source}}_{N,I}$ :: port variable	
91	122	-	k^B :: port variable	
90	121	-	N^A :: port variable	
89	132	-	λ_S :: port variable	
88	109	-	S_N :: port variable	
87	27	-	$I_{N,A}$ :: port variable	
86	2	-	$F_{N,A}$ :: port variable	
85	101	-	# :: port variable	
84	25	-	r_{zN} :: port variable	
83	24	-	r_{yN} :: port variable	
82	23	-	r_{xN} :: port variable	

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no	var	equ	quations	token
81	1	-	t :: port variable	
80	108	-	U_N :: port variable	
79	164	171	$\_x := {F^{source}}_{N,I} \overset{N}{\star} x_{N,S}$	
78	166	170	$\_T := {F^{source}}_{N,I} \overset{N}{\star} T_N$	
77	165	168	$x := \left({F^{sink}}_{N,I} \cdot \_x_{I,S}\right) \overset{I}{\star} S_{I,p}$	
76	167	164	$T := \left({F^{sink}}_{N,I} \cdot \_T_I\right) \overset{I}{\star} S_{I,p}$	
75	168	162	$f := x_{N,S,p}^{((\lvert N_{S,K} \rvert))}$	
74	199	158	$K := {K^o}_K \,.\, \mathbf{exp}\left((-{E^a}_K) \,.\, (R \,.\, T_{N,p})^{-1}\right)$	
73	169	156	$\xi := \prod_S f_{N,S,K,p}$	
72	200	151	$\tilde{n} := A_{N,p,q} \overset{p}{\star} \left(N_{S,K} \overset{K}{\star} (K_{N,K,p} \,.\, \xi_{N,K,p})\right)$	
71	201	148	$\_np := \mathbf{reduceSum}\left(\left(\left({F^{source}}_{N,I} \overset{N}{\star} \tilde{n}_{N,S,q}\right) \,.\, S_{I,q}\right), q\right)$	
70	141	147	$c_p := C_{pN} \,.\, (m_N)^{-1}$	
69	141	146	$c_p := \mathbf{Instantiate}(c_{pN}, \#)$	
68	137	145	$m := \lambda_S \overset{S}{\star} n_{N,S}$	
67	139	144	$n^t := \mathbf{reduceSum}\,(n_{N,S}, S)$	
66	143	143	$\rho := (V_N)^{-1} \,.\, m_N$	
65	202	140	$\tilde{n} := {F^{source}}_{N,I} \overset{I}{\star} \_np_{I,S}$	
64	195	139	$\dot{n}^d_x := F_{N,A} \overset{A}{\star} \hat{n}^d_{xA,S}$	
63	194	138	$\dot{n}^c_x := F_{N,A} \overset{A}{\star} \hat{n}^c_{xA,S}$	
62	222	137	$T^{ref} := \mathbf{Instantiate}(T_N, \#)$	

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no	var	equ	quations	token
61	124	136	$C_p := \frac{\partial H_N}{\partial T_N}$	
60	124	133	$C_p := m_N \,.\, c_{pN}$	
59	120	132	$v_z := \frac{\partial r_{zN}}{\partial t}$	
58	119	131	$v_y := \frac{\partial r_{yN}}{\partial t}$	
57	118	130	$v_x := \frac{\partial r_{xN}}{\partial t}$	
56	161	129	$\mu^o := \mathbf{Instantiate}(\mu_{N,S}, \#)$	
55	140	127	$x := {(n^t}_N)^{-1} \,.\, n_{N,S}$	
54	123	124	$R := N^A \,.\, k^B$	
53	189	122	$\rho := I_{N,A} \overset{N}{\star} \rho_N$	
52	183	120	$k_x^c := I_{N,A} \overset{N}{\star} \left(\left(\lambda_S \overset{S}{\star} (\mu_{N,S})^{-1} \right) \,.\, (V_N)^{-1} \,.\, \frac{\partial U_N}{\partial p_N} \,.\, v_{xN} \right)$	
51	157	119	$d := \mathbf{sign} \left(F_{N,A} \overset{N}{\star} p_N \right)$	
50	104	118	$0.5 := \mathbf{Instantiate}(\#, \#)$	
49	203	117	$n^o := \mathbf{Instantiate}(n_{N,S}, \#)$	
48	196	113	$\dot{n} := \dot{n}_{xN,S}^c + \dot{n}_{xN,S}^d + V_N \,.\, \tilde{n}_{N,S}$	
47	188	112	$k_z^q := I_{N,A} \overset{N}{\star} \left((V_N)^{-1} \,.\, C_{pN} \,.\, v_{zN} \right)$	
46	187	111	$k_y^q := I_{N,A} \overset{N}{\star} \left((V_N)^{-1} \,.\, C_{pN} \,.\, v_{yN} \right)$	
45	186	110	$k_x^q := I_{N,A} \overset{N}{\star} \left((V_N)^{-1} \,.\, C_{pN} \,.\, v_{xN} \right)$	
44	113	108	$T := \frac{\partial U_N}{\partial S_N}$	
43	113	105	$T := H_N \,.\, (C_{pN})^{-1} + {T^{ref}}_N$	
42	192	104	$\hat{k}_z^{d,Fick} := I_{N,A} \overset{N}{\star} \left(v_{zN} \,.\, \frac{\partial U_N}{\partial \mu_{N,S}} \,.\, (n_{N,S})^{-1} \right)$	

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no	var	equ	quations	token
41	182	102	$k_z^d := I_{N,A} \overset{N}{\star} \left((\mu_{N,S})^{-1} \,.\, \left(v_{zN} \,.\, \left((V_N)^{-1} \,.\, \frac{\partial U_N}{\partial \mu_{N,S}} \right) \right) \right)$	
40	148	101	$A_{xy} := r_{xN} \,.\, r_{yN}$	
39	181	100	$k_y^d := I_{N,A} \overset{N}{\star} \left((\mu_{N,S})^{-1} \,.\, \left(v_{yN} \,.\, \left((V_N)^{-1} \,.\, \frac{\partial U_N}{\partial \mu_{N,S}} \right) \right) \right)$	
38	191	98	$\hat{k}_y^{d,Fick} := I_{N,A} \overset{N}{\star} \left(v_{yN} \,.\, \frac{\partial U_N}{\partial \mu_{N,S}} \,.\, (n_{N,S})^{-1} \right)$	
37	149	97	$A_{xz} := r_{xN} \,.\, r_{zN}$	
36	190	96	$\hat{k}_x^{d,Fick} := I_{N,A} \overset{N}{\star} \left(v_{xN} \,.\, \frac{\partial U_N}{\partial \mu_{N,S}} \,.\, (n_{N,S})^{-1} \right)$	
35	138	95	$c := (V_N)^{-1} \,.\, n_{N,S}$	
34	180	92	$k_x^d := I_{N,A} \overset{N}{\star} \left((\mu_{N,S})^{-1} \,.\, \left(v_{xN} \,.\, \left((V_N)^{-1} \,.\, \frac{\partial U_N}{\partial \mu_{N,S}} \right) \right) \right)$	
33	150	91	$A_{yz} := r_{yN} \,.\, r_{zN}$	
32	114	87	$\mu := \mu^o{}_{N,S} + R \,.\, T_N \,.\, \mathbf{ln}\,(x_{N,S})$	
31	114	86	$\mu := \frac{\partial U_N}{\partial n_{N,S}}$	
30	159	83	$\hat{V} := (\rho_A)^{-1} \,.\, k_{xA}^c \,.\, A_{yzN} \,.\, F_{N,A} \overset{N}{\star} p_N$	
29	158	80	$c := (0.5 \,.\, (F_{N,A} - d_A \,.\, \lvert F_{N,A} \rvert)) \overset{N}{\star} c_{N,S}$	
28	111	77	$n := \int_{t^o}^{t^e} \dot{n}_{N,S} \;\, d\,t + n^o{}_{N,S}$	
27	211	76	$\hat{w} := \mathbf{Instantiate}(\hat{q}_{xA}, \#)$	
26	153	74	$\hat{q}_z := k_{zA}^q \,.\, A_{xyN} \,.\, F_{N,A} \overset{N}{\star} T_N$	
25	152	72	$\hat{q}_y := k_{yA}^q \,.\, A_{xzN} \,.\, F_{N,A} \overset{N}{\star} T_N$	
24	151	69	$\hat{q}_x := k_{xA}^q \,.\, A_{yzN} \,.\, F_{N,A} \overset{N}{\star} T_N$	
23	156	67	$\hat{n}_z^d := \hat{k}_z^{d,Fick}{}_{A,S} \,.\, (A_{xyN} \,.\, F_{N,A}) \overset{N}{\star} c_{N,S}$	
22	156	64	$\hat{n}_z^d := k_z^d{}_{A,S} \,.\, (A_{xyN} \,.\, F_{N,A}) \overset{N}{\star} \mu_{N,S}$	

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no	var	equ	quations	token
21	155	62	$\hat{n}^d_y := k^d_{yA,S} \,.\, (A_{yzN} \,.\, F_{N,A}) \overset{N}{\star} \mu_{N,S}$	
20	155	59	$\hat{n}^d_y := \hat{k}^{d,Fick}_{yA,S} \,.\, A_{xzN} \,.\, F_{N,A} \overset{N}{\star} c_{N,S}$	
19	154	56	$\hat{n}^d_x := \hat{k}^{d,Fick}_{xA,S} \,.\, A_{yzN} \,.\, F_{N,A} \overset{N}{\star} c_{N,S}$	
18	154	52	$\hat{n}^d_x := k^d_{xA,S} \,.\, (A_{yzN} \,.\, F_{N,A}) \overset{N}{\star} \mu_{N,S}$	
17	160	49	$\hat{n}^c_x := \hat{V}_A \,.\, c_{A,S}$	
16	136	47	$h := H_N \,.\, (n_{N,S})^{-1}$	
15	214	45	$\dot{w} := F_{N,A} \overset{A}{\star} \hat{w}_A$	
14	210	43	$\dot{q}_z := F_{N,A} \overset{A}{\star} \hat{q}_{zA}$	
13	209	41	$\dot{q}_y := F_{N,A} \overset{A}{\star} \hat{q}_{yA}$	
12	208	39	$\dot{q}_x := F_{N,A} \overset{A}{\star} \hat{q}_{xA}$	
11	207	37	$\dot{H}^d_z := F_{N,A} \overset{A}{\star} \left(\hat{n}^d_{zA,S} \overset{S}{\star} h_{N,S} \right)$	
10	206	35	$\dot{H}^d_y := F_{N,A} \overset{A}{\star} \left(\hat{n}^d_{yA,S} \overset{S}{\star} h_{N,S} \right)$	
9	205	33	$\dot{H}^d_x := F_{N,A} \overset{A}{\star} \left(\hat{n}^d_{xA,S} \overset{S}{\star} h_{N,S} \right)$	
8	204	29	$\dot{H}^c_x := F_{N,A} \overset{A}{\star} \left(\hat{n}^c_{xA,S} \overset{S}{\star} h_{N,S} \right)$	
7	216	28	$H^o := \mathbf{Instantiate}(H_N, \#)$	
6	215	19	$\dot{H} := \dot{H}^c_{xN} + \dot{H}^d_{xN} + \dot{H}^d_{yN} + \dot{H}^d_{zN} + \dot{q}_{xN} + \dot{q}_{yN} + \dot{q}_{zN} + \dot{w}_N$	
5	106	18	$t^e := \mathbf{Instantiate}(t, \#)$	
4	105	16	$t^o := \mathbf{Instantiate}(t, \#)$	
3	112	15	$p := \frac{\partial U_N}{\partial V_N}$	
2	110	11	$V := r_{xN} \,.\, r_{yN} \,.\, r_{zN}$	

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no	var	equ	quations	token
1	115	5	$H := \int_{t^o}^{t^e} \dot{H}_N \ dt + H^o{}_N$	
0	115	1	$H := U_N - p_N \,.\, V_N$	