Erratum: Modeling the remnant mass, spin, and recoil from unequal-mass, precessing black-hole binaries: The intermediate mass ratio regime
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The fits presented in the paper had an error in L_{isco} and were also not optimized for the aligned spin case. Of these two, the latter has a larger effect when using the formula for extrapolation. In addition, there were errors in the remnant spins obtained from the radiated angular momentum in Table XVIII.

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I. CORRECTION TO EQS. (35)–(37) AND TABLE XIV

The following corrects an error in Eqs. (35)–(37) and Table XIV in the original manuscript. The source of the error was a typo in the formula for L_{isco} used in the fitting procedure.

To fit A_c [see Eq. (31) in the original manuscript] we have several options. First, we can start with the form of Healy *et al.* [1] for the remnant spin for the aligned case and add nonaligned corrections. Alternatively, we may start with alternate forms of the aligned spin remnant spin function.

The form of the Healy *et al.* spin is

$$\begin{aligned} \alpha_{\text{align}} = (4\eta)^2 \{ & L_0 + L_1 \tilde{S}_{\parallel} + L_{2a} \tilde{\Delta}_{\parallel} \delta m + L_{2b} \tilde{S}_{\parallel}^2 + L_{2c} \tilde{\Delta}_{\parallel}^2 + L_{2d} \delta m^2 + L_{3a} \tilde{\Delta}_{\parallel} \tilde{S}_{\parallel} \delta m + L_{3b} \tilde{S}_{\parallel} \tilde{\Delta}_{\parallel}^2 + L_{3c} \tilde{S}_{\parallel}^3 + L_{3d} \tilde{S}_{\parallel} \delta m^2 \\ & + L_{4a} \tilde{\Delta}_{\parallel} \tilde{S}_{\parallel}^2 \delta m + L_{4b} \tilde{\Delta}_{\parallel}^3 \delta m + L_{4c} \tilde{\Delta}_{\parallel}^4 + L_{4d} \tilde{S}_{\parallel}^4 + L_{4e} \tilde{\Delta}_{\parallel}^2 \tilde{S}_{\parallel}^2 + L_{4f} \delta m^4 + L_{4g} \tilde{\Delta}_{\parallel} \delta m^3 + L_{4h} \tilde{\Delta}_{\parallel}^2 \delta m^2 + L_{4i} \tilde{S}_{\parallel}^2 \delta m^2 \} \\ & + \tilde{S}_{\parallel} (1 + 8\eta) \delta m^4 + \eta L_{\text{isco}} \delta m^6, \end{aligned} \quad (1)$$

where the last line in Eq. (1) is due to the particle limit and

$$\begin{aligned} L_{\text{isco}} &= \frac{2}{\sqrt{3}r_{\text{isco}}} (3\sqrt{r_{\text{isco}}} - 2\tilde{S}_{\parallel}), \\ r_{\text{isco}} &= 3 + Z_2 - \text{SIGN}(\tilde{S}_{\parallel}) \sqrt{(3 - Z_1)(3 + Z_1 + 2Z_2)}, \\ Z_1 &= 1 + (1 - \tilde{S}_{\parallel}^2)^{1/3} ((1 + \tilde{S}_{\parallel})^{1/3} + (1 - \tilde{S}_{\parallel})^{1/3}), \\ Z_2 &= \sqrt{3\tilde{S}_{\parallel}^2 + Z_1^2}. \end{aligned}$$

TABLE I. Coefficients in Eq. (1) for the A_c fit. These are from Healy *et al.* and reproduced here for reference.

L0	0.686710	L1	0.613247
L2a	−0.145427	L2b	−0.115689
L2c	−0.005254	L2d	0.801838
L3a	−0.073839	L3b	0.004759
L3c	−0.078377	L3d	1.585809
L4a	−0.003050	L4b	−0.002968
L4c	0.004364	L4d	−0.047204
L4e	−0.053099	L4f	0.953458
L4g	−0.067998	L4h	0.001629
L4i	−0.066693		

TABLE II. Coefficients in Eq. (1). Left values are for A'_c and right for A_{alt} . The coefficients in the bottom section are common to both and are derived from Hemberger *et al.* All unspecified coefficients are zero.

$L2a$	-0.517 ± 0.01	$L2a$	-0.148 ± 0.007
$L2d$	0.81 ± 0.017	$L2c$	-0.003 ± 0.001
$L3d$	1.587 ± 0.061	$L2d$	0.814 ± 0.008
$L4f$	0.692 ± 0.054	$L3a$	-0.099 ± 0.043
$L4g$	1.003 ± 0.081	$L3d$	1.615 ± 0.01
		$L4b$	-0.013 ± 0.011
		$L4e$	-0.077 ± 0.058
		$L4f$	0.832 ± 0.05
		$L4i$	-0.093 ± 0.067
$L0$	0.686403		
$L1$	0.613203		
$L2b$	-0.107373		
$L3c$	-0.0784152		
$L4d$	-0.079896		

TABLE III. Coefficients in Eq. (2) for A_c (top section), A'_c (second section), A_{at} (third section). Coefficients common to all are given in the bottom section.

AA	3.008 ± 0.862	AB	-7.334 ± 4.39
AD	-2.011 ± 0.552	AE	5.1 ± 2.816
AG	-2.804 ± 0.864	AH	5.143 ± 1.539
AA	2.189 ± 0.025	AD	0.547 ± 0.099
AA	3.402 ± 0.859	AB	-4.571 ± 4.373
AD	-2.216 ± 0.55	AE	3.713 ± 2.805
AG	-3.099 ± 0.86	AH	5.999 ± 1.534
a_1	0.8401 ± 0.0061	a_2	-0.328 ± 0.029
a_3	-0.61 ± 0.16	ζ_1	-0.0209 ± 0.0070
ζ_2	-0.038 ± 0.012	ζ_3	0.04 ± 0.16

We will also consider replacing $\vec{S}$ with $\vec{S}_0 = \vec{S} + 1/2\delta m\vec{\Delta}$ and using Hemberger *et al.*'s [2] coefficients for some of the terms in Eq. (1).

The fitting formula for the generic case is

$$\begin{aligned}
A_c = A_c^{\parallel} &+ (4\eta)^2 \left(|\tilde{S}_{\perp}|^2 (a_1 + a_2 \tilde{S}_{\parallel} + a_3 \tilde{S}_{\parallel}^2) + |\tilde{\Delta}_{\perp}|^2 (\zeta_1 + \zeta_2 \tilde{S}_{\parallel} + \zeta_3 \tilde{S}_{\parallel}^2) + \delta m^2 |\tilde{S}_{\perp}|^2 (A_A + \tilde{S}_{\parallel} A_B) \right. \\
&+ \delta m^2 |\tilde{\Delta}_{\perp}|^2 (A_D + \tilde{S}_{\parallel} A_E) + A_F \delta m |\tilde{\Delta}_{\perp}| |\tilde{S}_{\perp}| + A_G \tilde{\Delta}_{\parallel}^2 |\tilde{\Delta}_{\perp}|^2 + A_H \tilde{\Delta}_{\parallel}^2 |\tilde{S}_{\perp}|^2 \Big) \\
&+ \delta m^6 (1 + 12\eta) S_{\perp}^2,
\end{aligned} \tag{2}$$

where $A_c^{\parallel} \equiv \alpha_{\text{align}}^2$ and the last line in Eq. (2) is due to the particle limit.

Here we consider three alternatives denoted by A_c , A'_c , and A_{alt} . The A_c fit is obtained by using the Healy *et al.* parameters as given there (reproduced here in Table 1) for Eq. (1) and then fitting the remaining coefficients in Eq. (2). For the A'_c fit, we replace $\vec{S}$ by $\vec{S}_0$ for all terms in both Eq. (1) and Eq. (2), except for terms associated with the particle limit [last line in both Eqs. (1) and (2)]. To do this, we need to refit the Healy *et al.* data to the new form of Eq. (1). In addition, we also used the Hemberger *et al.* choices for some of the parameters (see Table II). A_{alt} is like A'_c except we do not replace S by S_0 (but do refit the Healy *et al.* data). The fitting coefficients are given in Tables II and III. Relative rms errors in the fits are 0.020, 0.024, 0.005. Absolute rms errors are 0.0029, 0.0027, 0.0009.

FIG. 1. Plots of the fitted A_c versus inclination angle θ and q for the NQ configurations. Each data point represents the value of A_c for a family of azimuthal configurations with the same inclination angle and mass ratio. Note that $\alpha \approx \sqrt{A_c}$ and that a prime denotes that $\vec{S}_0$ was used in the fits, rather than $\vec{S}$.

FIG. 2. The relative errors (residuals) in the fit of A_c as a function of the binary's parameters. Note that there are multiple data for each q , and a prime denotes that $\tilde{S}_0$ was used in the fits, rather than $\tilde{S}$.

II. CORRECTION TO TABLE XVIII

The following table contains corrections to Table XVIII of the original manuscript.

TABLE IV. Comparison between remnant horizon properties and radiated quantities. Differences between the two are a much better measurement of the true error than either the (very small) variations in the isolated horizon quantities with time or the extrapolation error in the radiative quantities. Here $\delta\Theta$ is the angle, in degrees, that the total angular momentum $\vec{J}$ precesses from the start of the simulation to the final ringdown. Rows with a **bold** header differ from the original manuscript.

Configuration	M_{rem} (IH)	M_{rem} (r)	S_{xrem} (IH)	S_{xrem} (r)	S_{yrem} (IH)	S_{yrem} (r)	S_{zrem} (IH)	S_{zrem} (r)	$\delta\Theta$ (IH)	$\delta\Theta$ (r)
NQ200TH30PH0	0.9670	0.9677	-0.0063	0.0011	0.0241	0.0325	0.6210	0.6198	0.9	0.1
PH30		0.9677		-0.0154		0.0288		0.6200		0.1
PH60	0.9672	0.9678	-0.0253	-0.0277	0.0260	0.0174	0.6210	0.6203	1.0	0.1
PH90	0.9673	0.9678	-0.0282	-0.0326	0.0060	0.0013	0.6215	0.6204	0.6	0.1
PH120	0.9672	0.9678	-0.0252	-0.0288	-0.0077	-0.0151	0.6215	0.6203	0.8	0.1
PH150	0.9671	0.9677	-0.0280	-0.0172	-0.0367	-0.0275	0.6200	0.6200	1.4	0.1
NQ200TH60PH0	0.9687	0.9697	0.0060	0.0046	0.0488	0.0537	0.6091	0.6131	0.8	0.5
PH30	0.9688	0.9698	-0.0248	-0.0263	0.0449	0.0530	0.6090	0.6157	0.4	0.4
PH60	0.9688	0.9697	-0.0512	-0.0494	0.0428	0.0382	0.6068	0.6166	1.5	0.9
PH90	0.9686	0.9695	-0.0548	-0.0577	0.0008	0.0113	0.6071	0.6161	0.1	1.1
PH120	0.9684	0.9694	-0.0533	-0.0517	-0.0122	-0.0177	0.6066	0.6118	1.5	1.0
PH150	0.9685	0.9695	-0.0247	-0.0322	-0.0490	-0.0408	0.6075	0.6108	0.3	0.8
NQ200TH90PH0	0.9686	0.9692	-0.0040	-0.0053	0.0524	0.0624	0.5869	0.5813	0.8	0.6
PH30		0.9696		-0.0360		0.0518		0.5833		0.6
PH60	0.9692	0.9697	-0.0554	-0.0571	0.0342	0.0267	0.5875	0.5831	0.5	0.6
PH90		0.9697		-0.0630		-0.0054		0.5824		0.6

(Table continued)

TABLE IV. (*Continued*)

Configuration	M_{rem} (IH)	M_{rem} (r)	$S_{x\text{rem}}$ (IH)	$S_{x\text{rem}}$ (r)	$S_{y\text{rem}}$ (IH)	$S_{y\text{rem}}$ (r)	$S_{z\text{rem}}$ (IH)	$S_{z\text{rem}}$ (r)	$\delta\Theta$ (IH)	$\delta\Theta$ (r)
PH120	0.9689	0.9694	-0.0557	-0.0518	-0.0286	-0.0359	0.5861	0.5812	0.4	0.6
PH150	0.9686	0.9692	-0.0241	-0.0268	-0.0590	-0.0566	0.5851	0.5803	0.9	0.6
NQ200TH135PH0		0.9721		-0.0007		0.0464		0.5507		0.4
PH30		0.9722		-0.0238		0.0398		0.5511		0.4
PH60		0.9722		-0.0406		0.0226		0.5533		0.4
PH90	0.9718	0.9722	-0.0500	-0.0466	-0.0019	-0.0008	0.5569	0.5509	0.8	0.5
PH120		0.9721		-0.0400		-0.0239		0.5504		0.5
PH150	0.9715	0.9720	-0.0124	-0.0227	-0.0357	-0.0405	0.5570	0.5503	0.9	0.5
NQ66TH60PH0	0.9534	0.9551	0.0094	0.0050	0.1569	0.1572	0.6985	0.7056	1.6	1.5
PH30	0.9535	0.9552	-0.0888	-0.0755	0.1411	0.1503	0.6968	0.7056	0.8	1.0
PH60	0.9541	0.9557	-0.1300	-0.1380	0.0897	0.0934	0.7008	0.7081	1.7	1.2
PH90	0.9552	0.9567	-0.1772	-0.1605	0.0012	0.0133	0.6999	0.7126	0.2	1.7
PH120	0.9558	0.9573	-0.1507	-0.1401	-0.0666	-0.0656	0.7054	0.7154	1.7	2.1
PH150	0.9546	0.9562	-0.0789	-0.0841	-0.1414	-0.1274	0.7015	0.7118	1.0	2.1
NQ50TH30PH0	0.9501	0.9524	0.0150	0.0009	0.1173	0.1262	0.7567	0.7626	1.2	0.1
PH30	0.9504	0.9527	-0.0664	-0.0624	0.1124	0.1101	0.7560	0.7640	0.5	0.1
PH60	0.9510	0.9532	-0.0977	-0.1092	0.0537	0.0648	0.7606	0.7655	1.0	0.1
PH90	0.9513	0.9535	-0.1243	-0.1274	-0.0078	0.0018	0.7595	0.7663	0.6	0.2
PH120	0.9510	0.9532	-0.1077	-0.1110	-0.0776	-0.0619	0.7571	0.7652	1.1	0.2
PH150	0.9503	0.9526	-0.0680	-0.0644	-0.1010	-0.1089	0.7567	0.7631	0.7	0.1
NQ50TH60PH0	0.9569	0.9589	0.0184	-0.0105	0.1969	0.2152	0.7025	0.7038	2.5	1.0
PH30	0.9576	0.9595	-0.0915	-0.1040	0.1727	0.1870	0.7058	0.7078	2.3	0.9
PH60	0.9583	0.9601	-0.1864	-0.1903	0.1067	0.1035	0.7022	0.7089	0.6	0.8
PH90	0.9592	0.9610	-0.1997	-0.2115	0.0156	-0.0014	0.7096	0.7132	2.3	1.1
PH120	0.9593	0.9611	-0.1731	-0.1754	-0.1003	-0.1098	0.7098	0.7128	1.9	1.6
PH150	0.9575	0.9594	-0.0949	-0.0980	-0.1853	-0.1857	0.7006	0.7062	1.4	1.3
NQ50TH90PH0	0.9657	0.9661	-0.0045	-0.0026	0.2253	0.2270	0.6172	0.6141	2.9	2.7
PH30	0.9652	0.9657	-0.0992	-0.1155	0.1939	0.1954	0.6174	0.6116	3.7	2.6
PH60	0.9652	0.9657	-0.1968	-0.1973	0.1083	0.1121	0.6139	0.6105	2.9	2.6
PH90	0.9653	0.9657	-0.2197	-0.2278	0.0079	-0.0013	0.6159	0.6103	3.4	2.5
PH120	0.9666	0.9670	-0.1867	-0.1988	-0.1086	-0.1168	0.6245	0.6164	3.9	2.5
PH150	0.9672	0.9676	-0.1132	-0.1127	-0.1989	-0.1997	0.6228	0.6198	2.8	2.7
NQ50TH135PH0	0.9760	0.9767	-0.0523	-0.0393	0.1427	0.1543	0.4518	0.4503	7.3	5.3
PH30	0.9758	0.9765	-0.1188	-0.1158	0.1040	0.1085	0.4481	0.4537	6.8	6.2
PH60	0.9756	0.9763	-0.1611	-0.1646	0.0280	0.0294	0.4443	0.4496	7.2	7.1
PH90	0.9754	0.9761	-0.1461	-0.1701	-0.0518	-0.0533	0.4457	0.4452	7.0	6.4
PH120	0.9754	0.9761	-0.1095	-0.1301	-0.1212	-0.1213	0.4435	0.4435	6.4	4.8
PH150	0.9759	0.9766	-0.0423	-0.0526	-0.1460	-0.1595	0.4512	0.4469	5.4	4.2
NQ33TH45PH0	0.9614	0.9630	0.0142	0.0045	0.2549	0.2409	0.7278	0.7354	1.7	0.4
PH30	0.9617	0.9632	-0.1091	-0.1166	0.2063	0.2110	0.7363	0.7362	0.7	0.4
PH60	0.9621	0.9635	-0.1995	-0.2066	0.1239	0.1249	0.7368	0.7368	0.6	0.4
PH90	0.9628	0.9641	-0.2357	-0.2418	0.0072	0.0051	0.7387	0.7387	0.6	0.4
PH120	0.9634	0.9647	-0.2064	-0.2126	-0.1167	-0.1166	0.7406	0.7406	0.2	0.4
PH150	0.9622	0.9637	-0.1308	-0.1251	-0.2079	-0.2068	0.7336	0.7372	0.9	0.4
NQ33TH75PH0	0.9715	0.9721	0.0149	0.0017	0.3120	0.3202	0.6433	0.6392	2.8	1.8
PH30	0.9718	0.9725	-0.1496	-0.1582	0.2684	0.2785	0.6467	0.6399	3.0	1.8
PH60	0.9718	0.9724	-0.2666	-0.2760	0.1535	0.1628	0.6454	0.6386	2.9	1.7
PH90	0.9720	0.9727	-0.3244	-0.3204	-0.0046	0.0038	0.6374	0.6390	1.4	1.8
PH120	0.9711	0.9718	-0.2752	-0.2774	-0.1623	-0.1546	0.6352	0.6361	1.7	1.9
PH150	0.9698	0.9705	-0.1573	-0.1612	-0.2773	-0.2734	0.6315	0.6324	1.6	1.7

(*Table continued*)

TABLE IV. (Continued)

Configuration	M_{rem} (IH)	M_{rem} (r)	$S_{x\text{rem}}$ (IH)	$S_{x\text{rem}}$ (r)	$S_{y\text{rem}}$ (IH)	$S_{y\text{rem}}$ (r)	$S_{z\text{rem}}$ (IH)	$S_{z\text{rem}}$ (r)	$\delta\Theta$ (IH)	$\delta\Theta$ (r)
NQ33TH100PH0	0.9768	0.9772	-0.0465	-0.0401	0.3187	0.3233	0.5205	0.5172	5.6	4.8
PH30	0.9766	0.9770	-0.1967	-0.1952	0.2528	0.2598	0.5200	0.5161	5.5	4.8
PH60	0.9767	0.9771	-0.2962	-0.2976	0.1238	0.1273	0.5192	0.5164	5.2	4.8
PH90	0.9765	0.9769	-0.3189	-0.3205	-0.0369	-0.0374	0.5177	0.5155	4.9	4.7
PH120	0.9770	0.9774	-0.2481	-0.2626	-0.1985	-0.1934	0.5244	0.5179	6.1	4.5
PH150	0.9781	0.9784	-0.1321	-0.1286	-0.3045	-0.3027	0.5217	0.5223	4.4	4.8
NQ33TH135PH0	0.9840	0.9841	-0.0587	-0.0628	0.2846	0.2723	0.2912	0.3007	10.6	9.9
PH30	0.9838	0.9839	-0.1928	-0.1896	0.2124	0.2033	0.2922	0.2994	10.5	9.9
PH60	0.9837	0.9838	-0.2731	-0.2647	0.0835	0.0805	0.2917	0.2989	10.8	9.9
PH90	0.9836	0.9837	-0.2750	-0.2679	-0.0667	-0.0624	0.2931	0.2992	10.9	9.8
PH120	0.9837	0.9839	-0.2116	-0.2010	-0.1880	-0.1882	0.2962	0.3019	9.7	9.6
PH150	0.9842	0.9843	-0.0912	-0.0812	-0.2699	-0.2670	0.2991	0.3030	9.5	9.8
NQ25TH30PH0		0.9692		0.0001		0.2055		0.7836		0.3
PH30	0.9673	0.9692	-0.0916	-0.1029	0.1698	0.1781	0.7797	0.7831	0.7	0.3
PH60	0.9671	0.9691	-0.1850	-0.1782	0.1128	0.1027	0.7720	0.7826	1.3	0.3
PH90	0.9668	0.9688	-0.2169	-0.2054	-0.0053	-0.0003	0.7708	0.7815	1.3	0.3
PH120		0.9686		-0.1775		-0.1030		0.7799		0.3
PH150	0.9665	0.9685	-0.0988	-0.1022	-0.1829	-0.1777	0.7735	0.7802	0.7	0.3
NQ25TH60PH0	0.9743	0.9754	0.0035	0.0048	0.3461	0.3553	0.6798	0.6786	1.4	0.8
PH30	0.9745	0.9755	-0.1651	-0.1732	0.3032	0.3106	0.6806	0.6783	1.6	0.8
PH60	0.9744	0.9755	-0.3025	-0.3052	0.1799	0.1827	0.6762	0.6774	0.9	0.7
PH90		0.9755		-0.3557		0.0061		0.6767		0.7
PH120		0.9750		-0.3104		-0.1712		0.6753		0.8
PH135	0.9729	0.9741	-0.2552	-0.2541	-0.2391	-0.2453	0.6707	0.6722	1.2	0.8
PH150	0.9726	0.9739	-0.1832	-0.1810	-0.2952	-0.3031	0.6716	0.6721	1.3	0.7
PH165	0.9733	0.9745	-0.1056	-0.0961	-0.3493	-0.3408	0.6660	0.6748	1.0	0.7
NQ25TH90PH0	0.9810	0.9815	-0.0145	-0.0182	0.4000	0.4065	0.5287	0.5253	3.5	3.1
PH30	0.9810	0.9815	-0.2100	-0.2180	0.3390	0.3430	0.5293	0.5247	3.6	3.1
PH60	0.9804	0.9809	-0.3486	-0.3577	0.1894	0.1888	0.5257	0.5217	3.5	3.0
PH90	0.9805	0.9810	-0.3911	-0.4043	-0.0147	-0.0146	0.5302	0.5220	4.2	2.9
PH120	0.9814	0.9819	-0.3382	-0.3423	-0.2091	-0.2168	0.5308	0.5265	3.7	3.2
PH150	0.9797	0.9803	-0.1661	-0.1861	-0.3537	-0.3557	0.5266	0.5208	4.9	3.2
NQ25TH135PH0	0.9883	0.9884	-0.0557	-0.0567	0.3408	0.3357	0.1754	0.1847	11.8	10.9
PH30	0.9881	0.9883	-0.2207	-0.2164	0.2638	0.2609	0.1760	0.1849	12.1	10.8
PH60	0.9881	0.9883	-0.3204	-0.3177	0.1212	0.1165	0.1774	0.1848	11.5	10.9
PH90	0.9881	0.9882	-0.3362	-0.3327	-0.0503	-0.0583	0.1821	0.1857	10.4	10.9
PH120	0.9884	0.9885	-0.2683	-0.2611	-0.2133	-0.2178	0.1839	0.1880	10.4	10.7
PH150	0.9886	0.9888	-0.1191	-0.1192	-0.3184	-0.3209	0.1912	0.1862	10.2	10.9
NQ25TH150PH0	0.9887	0.9888	-0.0673	-0.0714	0.2247	0.2230	0.1261	0.1226	18.3	19.4
PH30	0.9886	0.9887	-0.1698	-0.1730	0.1558	0.1565	0.1313	0.1227	17.9	19.4
PH60	0.9886	0.9887	-0.2227	-0.2276	0.0522	0.0485	0.1334	0.1231	17.0	19.4
PH90	0.9886	0.9887	-0.2200	-0.2211	-0.0682	-0.0722	0.1324	0.1242	17.6	19.3
PH120	0.9887	0.9888	-0.1570	-0.1565	-0.1714	-0.1742	0.1316	0.1250	18.0	19.3
PH150	0.9888	0.9889	-0.0568	-0.0497	-0.2280	-0.2301	0.1275	0.1237	17.8	19.4
NQ16TH45PH0	0.9793	0.9808	0.0032	-0.0002	0.3503	0.3611	0.7128	0.7179	0.3	0.4
PH30	0.9796	0.9810	-0.1727	-0.1809	0.3059	0.3134	0.7134	0.7187	0.3	0.4
PH60	0.9795	0.9809	-0.2949	-0.3130	0.1795	0.1804	0.7155	0.7175	0.8	0.4
PH90	0.9792	0.9807	-0.3558	-0.3611	-0.0026	-0.0005	0.7111	0.7160	0.3	0.4
PH120	0.9800	0.9814	-0.3085	-0.3138	-0.1684	-0.1811	0.7141	0.7190	0.6	0.4
PH150		0.9807		-0.1803		-0.3128		0.7169		0.4
NQ16TH90PH0		0.9885		-0.0187		0.5209		0.4351		2.6
PH30		0.9886		-0.2758		0.4425		0.4348		2.6

(Table continued)

TABLE IV. (*Continued*)

Configuration	M_{rem} (IH)	M_{rem} (r)	$S_{x\text{rem}}$ (IH)	$S_{x\text{rem}}$ (r)	$S_{y\text{rem}}$ (IH)	$S_{y\text{rem}}$ (r)	$S_{z\text{rem}}$ (IH)	$S_{z\text{rem}}$ (r)	$\delta\Theta$ (IH)	$\delta\Theta$ (r)
PH60		0.9878		-0.4566		0.2470		0.4315		2.3
PH90		0.9877		-0.5182		-0.0136		0.4311		2.3
PH120		0.9886		-0.4423		-0.2738		0.4349		2.5
PH150		0.9875		-0.2457		-0.4567		0.4313		2.4
NQ16TH115PH0	0.9908	0.9911	-0.0510	-0.0539	0.4954	0.4991	0.2175	0.2097	5.4	5.7
PH30	0.9909	0.9911	-0.2906	-0.2961	0.4096	0.4050	0.2076	0.2102	5.0	5.7
PH60	0.9913	0.9915	-0.4599	-0.4603	0.2010	0.2040	0.2149	0.2119	5.9	5.6
PH90	0.9913	0.9915	-0.4999	-0.5003	-0.0617	-0.0533	0.2103	0.2126	6.5	5.6
PH120	0.9906	0.9908	-0.4061	-0.4033	-0.2845	-0.2942	0.2184	0.2119	4.7	5.6
PH150	0.9912	0.9915	-0.2187	-0.2055	-0.4518	-0.4606	0.2164	0.2115	3.9	5.5
NQ16TH135PH0		0.9931		-0.0425		0.4098		0.0255		7.8
PH30	0.9929	0.9930	-0.2422	-0.2424	0.3322	0.3326	0.0161	0.0256	8.8	7.9
PH60		0.9931		-0.3765		0.1667		0.0257		7.9
PH90	0.9929	0.9931	-0.4083	-0.4096	-0.0448	-0.0443	0.0250	0.0257	8.1	8.0
PH120		0.9932		-0.3333		-0.2429		0.0241		8.1
PH150		0.9929		-0.1657		-0.3747		0.0243		8.1
NQ16TH150PH0	0.9936	0.9937	-0.0293	-0.0326	0.2915	0.2924	-0.0687	-0.0692	10.8	11.2
PH30	0.9936	0.9938	-0.1682	-0.1749	0.2387	0.2375	-0.0730	-0.0691	11.3	11.2
PH60	0.9937	0.9938	-0.2679	-0.2706	0.1198	0.1184	-0.0704	-0.0692	11.2	11.2
PH90	0.9937	0.9939	-0.2932	-0.2939	-0.0265	-0.0326	-0.0686	-0.0696	10.5	11.2
PH120	0.9937	0.9939	-0.2387	-0.2383	-0.1700	-0.1743	-0.0709	-0.0704	11.0	11.3
PH150	0.9936	0.9938	-0.1192	-0.1181	-0.2668	-0.2691	-0.0705	-0.0701	11.2	11.3

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