NOTE—The mean Bayes factors along with standard deviations $\langle \ln \mathcal{B}_{\alpha\beta} \rangle \pm \sigma(\ln \mathcal{B}_{\alpha\beta})$ for a SN distance of 10kpc regarding the EoS discrimination.

HK IBD				DUNE ν_e + Ar			JUNO IBD		
M_α / M_β	FS 11.2M$_\odot$	FT 11.2M$_\odot$	LS 11.2M$_\odot$	FS 11.2M$_\odot$	FT 11.2M$_\odot$	LS 11.2M$_\odot$	FS 11.2M$_\odot$	FT 11.2M$_\odot$	LS 11.2M$_\odot$
FS 11.2M$_\odot$									
NO		50.31 ± 7.98	34.31 ± 11.24		3.30 ± 2.55	2.74 ± 1.88		3.79 ± 2.20	3.57 ± 3.72
NMO		34.16 ± 6.35	20.14 ± 7.72		0.5 ± 1.18	0.59 ± 0.94		2.84 ± 1.49	1.85 ± 3.16
IMO		24.73 ± 6.32	18.38 ± 7.94		0.62 ± 1.45	0.62 ± 0.95		2.81 ± 1.34	0.73 ± 0.23
FT 11.2M$_\odot$									
NO	28.38 ± 9.22		124.26 ± 18.05	3.73 ± 2.83		1.41 ± 1.23	3.63 ± 3.16		9.41 ± 8.51
NMO	20.6 ± 7.54		58.04 ± 12.89	0.6 ± 1.17		0.56 ± 0.63	1.26 ± 1.43		5.66 ± 6.96
IMO	19.61 ± 7.27		24.49 ± 7.81	0.68 ±1.53		0.67 ± 0.64	1.23 ± 1.61		1.48 ± 5.44
LS 11.2M$_\odot$									
NO	78.99 ± 9.24	159.24 ± 13.84		2.88 ± 1.89	3.28 ± 2.17		5.47 ± 3.41	12.87 ± 7.14	
NMO	34.70 ± 8.53	94.68 ± 12.15		1.05 ± 0.77	0.72 ± 0.50		2.71 ± 2.96	7.14 ± 6.36	
IMO	18.58 ± 6.91	34.67 ± 7.75		1.26 ± 0.90	1.01 ± 0.54		1.63 ± 0.49	3.96 ± 5.15	
M_α / M_β	FT 15M$_\odot$	LS 15M$_\odot$		FT 15M$_\odot$	LS 15M$_\odot$		FT 15M$_\odot$	LS 15M$_\odot$	
FT 15M$_\odot$									
NO		234.94 ± 24.86			2.36 ± 2.77			21.5 ± 11.01	
NMO		143.22 ± 18.57			0.97 ± 2.30			10.98 ± 9.96	
IMO		64.95 ± 12.53			1.29 ± 2.18			4.63 ± 7.00	
LS 15M$_\odot$									
NO	322.94 ± 19.83			3.42 ± 2.48			26.44 ± 9.93		
NMO	200.20 ± 17.27			1.05 ± 1.99			19.54 ± 9.30		
IMO	81.99 ± 12.26			2.13 ± 2.14			8.21 ± 6.63		
M_α / M_β	FT 27M$_\odot$	LS 27M$_\odot$		FT 27M$_\odot$	LS 27M$_\odot$		FT 27M$_\odot$	LS 27M$_\odot$	
FT 27M$_\odot$									
NO		174.70 ± 21.75			1.21 ± 2.31			16.65 ± 10.51	
NMO		108.43 ± 17.45			0.96 ± 2.22			8.80 ± 9.62	
IMO		62.35 ± 12.40			1.01 ± 2.11			5.75 ± 7.06	
LS 27$_\odot$									
NO	258.54 ± 18.39			3.54 ± 2.19			20.13 ± 9.35		
NMO	169.79 ± 16.64			1.52 ± 1.90			14.72 ± 8.93		
IMO	80.15 ± 12.41			1.55 ± 1.96			6.77 ± 6.49		

NOTE—The mean Bayes factors along with standard deviations $\langle \ln \mathcal{B}_{\alpha,\beta} \rangle \pm \sigma(\ln \mathcal{B}_{\alpha,\beta})$ for a SN distance of 10kpc, regarding the progenitor-mass discrimination for the 2D models of our sample.

HK IBD				DUNE ν_e + Ar			JUNO IBD		
M_α / M_β	FT 11.2M$_\odot$	FT 15M$_\odot$	FT 27M$_\odot$	FT 11.2M$_\odot$	FT 15M$_\odot$	FT 27M$_\odot$	FT 11.2M$_\odot$	FT 15M$_\odot$	FT 27M$_\odot$
FT 11.2M$_\odot$									
NO		1452.63 ± 46.25	1006.48 ± 40.00		105.38 ± 12.05	79.44 ± 10.55		119.92 ± 13.99	80.07 ± 12.61
NMO		1072.35 ± 40.60	830.31 ± 36.19		1.46 ± 5.73	9.08 ± 6.45		89.78 ± 12.25	68.41 ± 11.35
IMO		445.73 ± 27.13	531.45 ± 29.68		28.79 ± 7.58	28.30 ± 7.58		38.56 ± 9.68	52.97 ± 10.44
FT 15M$_\odot$									
NO	1692.39 ± 70.14		179.18 ± 21.41	123.22 ± 20.39		16.09 ± 5.79	134.04 ± 21.17		12.84 ± 8.33
NMO	1246.17 ± 56.12		95.02 ± 14.67	26.22 ± 6.84		4.70 ± 1.37	99.24 ± 18.75		7.59 ± 7.94
IMO	489.19 ± 35.03		20.17 ± 6.35	41.00 ± 10.03		1.72 ± 2.07	47.80 ± 12.38		3.21 ± 3.17
FT 27M$_\odot$									
NO	1192.84 ± 54.58	177.54 ± 17.00		88.36 ± 15.95	11.49 ± 5.11		86.75 ± 17.33	17.72 ± 7.33	
NMO	935.63 ± 48.66	99.00 ± 13.31		31.40 ± 7.81	2.08 ± 1.42		73.57 ± 15.58	8.55 ± 7.03	
IMO	587.11 ± 37.98	23.89 ± 6.71		40.30 ± 9.78	2.40 ± 1.93		48.81 ± 13.05	5.05 ± 2.99	
M_α / M_β	LS 11.2M$_\odot$	LS 15M$_\odot$	LS 27M$_\odot$	LS 11.2M$_\odot$	LS 15M$_\odot$	LS 27M$_\odot$	LS 11.2M$_\odot$	LS 15M$_\odot$	LS 27M$_\odot$
LS 11.2M$_\odot$									
NO		1143.45 ± 41.40	933.35 ± 38.04		89.20 ± 11.06	78.96 ± 10.50		89.42 ± 12.56	71.89 ± 11.87
NMO		828.15 ± 36.97	739.55 ± 35.20		2.10 ± 5.11	5.66 ± 5.90		65.10 ± 11.18	58.27 ± 10.76
IMO		330.42 ± 23.00	424.50 ± 25.97		23.34 ± 6.97	25.06 ± 7.23		26.55 ± 9.23	42.36 ± 9.90
LS 15M$_\odot$									
NO	1131.89 ± 62.00		107.66 ± 15.57	101.64 ± 17.72		10.11 ± 4.86	100.38 ± 18.76		8.44 ± 5.12
NMO	942.53 ± 50.91		63.73 ± 12.10	19.98 ± 6.03		1.02 ± 1.07	73.84 ± 16.37		6.19 ± 4.13
IMO	353.85 ± 29.34		24.30 ± 6.80	33.64 ± 8.82		1.49 ± 2.08	36.03 ± 11.14		3.79 ± 2.01
LS 27M$_\odot$									
NO	1055.07± 53.19	107.02 ± 14.20		95.82 ± 17.72	12.73 ± 4.86		79.05 ± 15.88	8.82 ± 5.02	
NMO	832.07 ± 46.06	64.51 ± 10.51		27.80 ± 7.00	1.96 ± 1.01		63.77 ± 14.97	6.17 ± 6.23	
IMO	462.28 ± 33.04	27.02 ± 7.33		36.26 ± 9.30	2.65 ± 2.16		37.12 ± 12.19	2.50 ± 2.39	

NOTE—The mean Bayes factors along with standard deviations $\langle \ln \mathcal{B}_{\alpha,\beta} \rangle \pm \sigma(\ln \mathcal{B}_{\alpha,\beta})$ for a SN distance of 10kpc, regarding the progenitor-mass discrimination for the 3D models of our sample.

HK - IBD									
M_α / M_β	3D 9M$_\odot$	3D 10M$_\odot$	3D 12M$_\odot$	3D 13M$_\odot$	3D 14M$_\odot$	3D 15M$_\odot$	3D 19M$_\odot$	3D 25M$_\odot$	3D 60M$_\odot$
3D 9M$_\odot$									
NO		273.50 ± 20.56	240.88 ± 19.47	1277.73 ± 41.65	1763.96 ± 46.85	903.50 ± 35.30	1089.49 ± 39.62	2084.35 ± 62.96	690.39 ± 32.25
NMO		187.80 ± 17.79	173.09 ± 17.33	950.16 ± 37.57	1297.80 ± 42.30	633.18 ± 31.09	860.09 ± 36.67	1987.14 ± 58.72	561.28 ± 30.61
IMO		68.89 ± 10.88	74.46 ± 11.38	432.62 ± 25.98	567.16 ± 28.49	231.11 ± 19.34	477.54 ± 27.62	1486.25 ± 44.67	342.91 ± 23.89
3D 10M$_\odot$									
NO	287.36 ± 27.48		14.16 ± 6.19	446.38 ± 27.11	776.50 ± 34.44	230.87 ± 19.87	358.67 ± 24.50	2015.01 ± 53.88	163.70 ± 16.94
NMO	192.02 ± 21.95		7.65 ± 4.91	346.26 ± 24.92	587.42 ± 30.84	162.85 ± 17.08	305.37 ± 23.71	1656.77 ± 50.64	147.90 ± 16.96
IMO	65.43 ± 12.57		4.29 ± 3.44	180.49 ± 17.80	286.46 ± 21.42	62.65 ± 10.62	211.80 ± 19.32	1011.92 ± 39.14	129.89 ± 15.35
3D 12M$_\odot$									
NO	251.82 ± 24.96	20.90 ± 5.83		502.68 ± 27.98	851.27 ± 35.05	288.54 ± 21.73	376.25 ± 24.76	2097.15 ± 53.76	150.64 ± 16.17
NMO	177.83 ± 20.42	14.33 ± 4.70		376.21 ± 24.60	628.88 ± 30.39	195.93 ± 17.82	310.51 ± 22.91	1696.88 ± 48.93	136.53 ± 15.67
IMO	75.52 ± 12.86	6.73 ± 3.33		180.08 ± 17.48	290.74 ± 21.06	69.24 ± 10.93	197.71 ± 18.59	998.27 ± 38.22	112.20 ± 14.27
3D 13M$_\odot$									
NO	1504.07 ± 67.43	487.22 ± 33.89	549.02 ± 37.52		79.91 ± 11.63	78.11 ± 12.78	65.37 ± 12.62	676.29 ± 32.22	217.82 ± 23.80
NMO	1098.2 ± 57.12	376.48 ± 30.49	409.59 ± 32.77		57.62 ± 10.03	64.41 ± 11.91	42.36 ± 10.12	574.71 ± 31.09	131.74 ± 18.64
IMO	489.98 ± 37.10	196.48 ± 22.02	196.8 ± 22.84		30.25 ± 7.09	45.45 ± 10.18	27.94 ± 7.75	389.35 ± 25.61	53.80 ± 11.84
3D 14M$_\odot$									
NO	2122.18 ± 87.20	894.18 ± 49.21	986.89 ± 53.66	76.21 ± 13.76		213.35 ± 21.39	270.23 ± 27.25	406.21 ± 25.70	557.57 ± 39.20
NMO	1541.98 ± 72.38	672.26 ± 43.65	719.94 ± 46.28	55.46 ± 11.70		171.30 ± 20.12	182.00 ± 21.86	364.17 ± 25.26	359.12 ± 31.21
IMO	669.52 ± 46.69	333.12 ± 31.14	339.62 ± 32.42	30.85 ± 8.63		105.00 ± 15.86	105.10 ± 16.40	290.02 ± 22.43	163.85 ± 21.27
3D 15M$_\odot$									
NO	1059.12 ± 57.94	252.75 ± 25.28	315.3 ± 28.93	86.11 ± 11.64	217.47 ± 18.78		147.67 ± 16.62	1093.99 ± 40.77	172.43 ± 20.07
NMO	728.34 ± 46.14	177.15 ± 21.09	210.31 ± 23.56	70.27 ± 10.77	171.60 ± 16.87		114.62 ± 14.39	937.19 ± 38.14	105.50 ± 15.44
IMO	256.29 ± 26.21	67.99 ± 13.13	74.38 ± 14.13	47.53 ± 9.07	99.26 ± 13.01		94.14 ± 12.96	651.15 ± 32.07	64.49 ± 11.28
3D 19M$_\odot$									
NO	1244.07 ± 58.86	382.09 ± 29.72	395.93 ± 30.70	67.75 ± 11.17	224.75 ± 19.55	149.11 ± 17.93		867.24 ± 36.55	79.12 ± 14.22
NMO	976.05 ± 50.62	326.35 ± 27.20	325.97 ± 27.55	43.26 ± 8.71	150.5 ± 15.65	115.02 ± 15.43		682.13 ± 32.56	52.33 ± 11.61
IMO	530.92 ± 37.08	225.06 ± 22.74	207.51 ± 22.15	25.72 ± 7.01	78.38 ± 11.46	94.24 ± 14.30		385.12 ± 24.38	22.61 ± 7.71
3D 25M$_\odot$									
NO	2499.73 ± 128.39	2375.05 ± 84.67	2484.43 ± 89.84	724.85 ± 42.06	418.65 ± 30.43	1216.29 ± 55.41	979.28 ± 52.85		1512.27 ± 69.63
NMO	2159.61 ± 106.93	1967.75 ± 74.49	2010.62 ± 77.67	622.07 ± 38.16	377.43 ± 28.90	1046.57 ± 50.62	704.31 ± 45.04		1284.29 ± 58.14
IMO	1790.69 ± 78.88	1200.58 ± 60.09	1187.63 ± 61.44	426.37 ± 32.27	304.8 ± 26.36	735.29 ± 43.81	442.98 ± 35.52		592.54 ± 44.05
3D 60M$_\odot$									
NO	765.11 ± 44.26	178.6 ± 19.67	153.84 ± 18.44	206.3 ± 17.92	426.63 ± 25.88	174.11 ± 17.49	91.8 ± 11.85	1362.87 ± 43.62	
NMO	620.6 ± 39.12	160.68 ± 18.28	139.83 ± 17.35	131.3 ± 14.86	288.56 ± 21.81	110.22 ± 14.17	63.29 ± 10.04	923.23 ± 39.17	
IMO	372.11 ± 29.16	136.95 ± 16.74	114.20 ± 15.47	51.22 ± 9.15	119.39 ± 13.80	65.46 ± 11.17	27.17 ± 6.55	570.64 ± 27.71	

NOTE—The mean Bayes factors along with standard deviations $\langle \ln \mathcal{B}_{\alpha\beta} \rangle \pm \sigma(\ln \mathcal{B}_{\alpha\beta})$

DUNE									
M_α / M_β	3D 9M$_\odot$	3D 10M$_\odot$	3D 12M$_\odot$	3D 13M$_\odot$	3D 14M$_\odot$	3D 15M$_\odot$	3D 19M$_\odot$	3D 25M$_\odot$	3D 60M$_\odot$
3D 9M$_\odot$									
NO		26.02 ± 6.45	22.40 ± 5.96	91.35 ± 11.69	109.08 ± 12.79	65.83 ± 9.96	85.02 ± 11.21	210.98 ± 17.08	57.21 ± 9.36
NMO		2.19 ± 1.19	2.4 ± 1.39	5.1 ± 3.94	3.62 ± 0.09	2.21 ± 2.58	3.46 ± 2.73	8.47 ± 4.53	7.31 ± 5.13
IMO		3.7 ± 3.36	2.19 ± 3.36	20.5 ± 7.01	17.58 ± 7.49	9.37 ± 5.59	24.37 ± 7.33	43.39 ± 11.28	18.48 ± 6.31
3D 10M$_\odot$									
NO	31.32 ± 9.76		1.78 ± 2.11	23.61 ± 7.28	37.68 ± 8.96	12.60 ± 5.34	22.78 ± 6.65	99.16 ± 14.20	12.52 ± 4.60
NMO	2.35 ± 0.79		0.67 ± 0.28	3.0 ± 1.08	3.19 ± 0.43	0.76 ± 0.56	3.76 ± 3.90	6.14 ± 5.72	3.51 ± 3.27
IMO	6.6 ± 3.76		1.04 ± 0.35	4.59 ± 4.15	3.21 ± 4.70	1.85 ± 1.17	8.10 ± 4.58	12.28 ± 8.87	3.70 ± 3.52
3D 12M$_\odot$									
NO	25.52 ± 8.54	1.3 ± 1.86		28.20 ± 7.78	43.37 ± 9.43	15.51 ± 6.02	24.45 ± 6.99	106.47 ± 14.52	11.26 ± 4.62
NMO	2.56 ± 2.22	0.53 ± 0.22		2.52 ± 0.88	2.1 ± 1.00	0.51 ± 0.31	2.79 ± 3.68	3.27 ± 4.72	3.30 ± 3.03
IMO	8.85 ± 3.72	0.52 ± 0.21		4.10± 4.14	3.01 ± 3.72	0.84 ± 2.67	5.34 ± 4.49	15.30 ± 8.82	3.28 ± 3.38
3D 13M$_\odot$									
NO	117.05 ± 20.97	31.89 ± 9.04	38.5 ± 10.37		2.77 ± 2.80	6.50 ± 3.59	3.92 ± 3.01	23.02 ± 8.58	12.29 ± 6.16
NMO	5.3 ± 4.10	3.26 ± 1.69	3.32 ± 0.57		0.57 ± 0.65	2.45 ± 0.63	2.98 ± 1.16	3.01 ± 1.18	1.03 ± 1.10
IMO	20.86 ± 8.71	6.67 ± 4.63	5.88 ± 4.66		0.6 ± 1.10	2.81 ± 1.08	0.94 ± 0.66	5.37 ± 5.42	1.67 ± 1.82
3D 14M$_\odot$									
NO	143.58 ± 24.91	44.26 ± 11.90	51.65 ± 13.32	2.97 ± 2.27		10.79 ± 5.22	10.37 ± 5.63	20.62 ± 7.27	23.73 ± 8.97
NMO	6.82 ± 0.14	3.27 ± 0.65	3.96 ± 0.92	0.89 ± 0.68		2.12 ± 0.76	3.74 ± 1.29	3.96 ± 3.96	7.83 ± 1.30
IMO	19.32 ± 9.38	5.17 ± 5.30	6.07 ± 3.39	1.58 ± 0.61		3.49 ± 0.82	2.02 ± 1.62	5.43 ± 4.84	3.35 ± 1.52
3D 15M$_\odot$									
NO	85.75 ± 18.09	14.34 ± 6.43	21.03 ± 7.77	4.4 ± 3.21	7.83 ± 4.54		12.80 ± 4.39	49.06 ± 10.68	12.34 ± 5.35
NMO	5.21 ± 1.32	2.52 ± 0.33	2.51 ± 0.17	0.79 ± 0.29	1.38 ± 0.49		3.56 ± 2.49	4.96 ± 3.47	4.05 ± 1.99
IMO	16.13 ± 6.86	3.65 ± 1.09	3.72 ± 1.01	1.25 ± 1.31	1.65 ± 0.92		4.13 ± 1.67	8.40 ± 7.08	2.25 ± 2.09
3D 19M$_\odot$									
NO	103.54 ± 18.44	27.73 ± 8.18	31.96 ± 8.81	2.44 ± 2.83	5.51 ± 4.77	7.34 ± 4.76		43.99 ± 9.44	5.25 ± 3.99
NMO	5.46 ± 1.49	6.28 ± 4.23	4.77 ± 3.95	0.7 ± 1.25	2.78 ± 1.54	2.96 ± 2.69		3.10 ± 0.44	0.92 ± 0.1
IMO	29.65 ± 9.37	10.96 ± 5.26	11.86 ± 5.17	0.38 ± 0.92	0.74 ± 1.70	2.75 ± 2.86		4.01 ± 4.29	1.82 ± 0.60
3D 25M$_\odot$									
NO	275.14 ± 34.38	146.58 ± 20.77	156.85 ± 22.17	50.02 ± 10.38	32.84 ± 8.37	79.66 ± 14.00	67.07 ± 11.99		75.01 ± 16.28
NMO	10.79 ± 3.78	8.26 ± 5.17	10.65 ± 3.14	5.33 ± 3.36	4.16 ± 1.78	6.38 ± 2.49	3.76 ± 0.77		4.52 ± 1.11
IMO	58.03 ± 15.94	37.56 ± 11.39	31.30 ± 11.34	8.93 ± 6.20	11.89 ± 5.60	20.82 ± 8.37	7.05 ± 4.55		8.87 ± 3.26
3D 60M$_\odot$									
NO	66.83 ± 13.89	11.84 ± 5.26	12.38 ± 5.29	9.33 ± 4.93	17.01 ± 6.84	8.94 ± 4.88	3.01 ± 3.38	51.41 ± 11.59	
NMO	13.51 ± 5.91	6.33 ± 3.58	3.98 ± 3.25	1.55 ± 1.14	7.79 ± 1.54	2.85 ± 2.18	1.06 ± 0.15	3.78 ± 1.45	
IMO	23.56 ± 7.79	8.04 ± 3.91	7.80 ± 3.72	1.95 ± 0.35	1.69 ± 1.44	2.05 ± 2.19	1.32 ± 0.21	5.25 ± 4.36	

NOTE—Same as Table , but for the IBD channel at JUNE detector.

JUNO IBD									
M_α / M_β	3D 9M$_\odot$	3D 10M$_\odot$	3D 12M$_\odot$	3D 13M$_\odot$	3D 14M$_\odot$	3D 15M$_\odot$	3D 19M$_\odot$	3D 25M$_\odot$	3D 60M$_\odot$
3D 9M$_\odot$									
NO		28.78 ± 8.23	25.72 ± 7.94	128.40 ± 13.41	178.46 ± 14.82	92.02 ± 11.52	105.99 ± 12.94	326.35 ± 19.01	65.66 ± 11.16
NMO		22.01 ± 6.89	18.89 ± 6.90	97.61 ± 11.82	133.95 ± 13.15	66.25 ± 10.13	85.45 ± 11.70	263.27 ± 17.57	54.42 ± 9.99
IMO		7.36 ± 4.68	9.83 ± 5.07	40.85 ± 7.29	66.41 ± 9.81	29.27 ± 7.46	52.41 ± 9.61	156.54 ± 14.01	36.67 ± 9.02
3D 10M$_\odot$									
NO	22.96 ± 10.26		5.50 ± 1.02	50.15 ± 10.31	86.75 ± 12.13	27.07 ± 8.44	36.57 ± 9.18	202.21 ± 17.31	13.51 ± 7.37
NMO	13.35 ± 8.43		4.94 ± 1.03	39.67 ± 8.78	66.73 ± 10.58	19.44 ± 6.76	31.66 ± 8.47	168.24 ± 15.41	13.07 ± 6.67
IMO	6.38 ± 3.68		3.70 ± 0.82	23.59 ± 6.93	41.09 ± 7.55	7.62 ± 3.29	23.89 ± 7.61	109.29 ± 12.59	12.90 ± 6.37
3D 12M$_\odot$									
NO	18.04 ± 9.70	5.52 ± 4.06		58.05 ± 10.41	96.56 ± 12.42	34.90 ± 9.25	40.96 ± 9.96	212.93 ± 17.28	14.79 ± 6.93
NMO	12.71 ± 8.19	4.92 ± 2.83		44.65 ± 8.91	72.89 ± 10.92	24.44 ± 7.50	34.40 ± 8.96	174.60 ± 15.75	14.16 ± 6.20
IMO	4.97 ± 4.89	3.76 ± 1.61		20.98 ± 6.99	38.65 ± 7.73	7.55 ± 4.61	24.20 ± 7.67	109.87 ± 12.38	12.67 ± 6.26
3D 13M$_\odot$									
NO	128.38 ± 21.46	34.27 ± 12.00	36.80 ± 12.78		8.93 ± 6.13	6.68 ± 4.60	7.12 ± 0.46	75.88 ± 12.44	17.63 ± 7.24
NMO	93.01 ± 17.25	27.19 ± 10.65	29.89 ± 11.01		7.23 ± 3.88	6.09 ± 3.35	6.01 ± 0.34	65.16 ± 12.23	7.96 ± 2.80
IMO	34.37 ± 6.76	13.21 ± 8.60	16.44 ± 8.55		7.07 ± 3.28	5.67± 1.74	4.76 ± 0.70	45.86 ± 9.23	4.97 ±2.32
3D 14M$_\odot$									
NO	189.36 ± 27.36	71.97 ± 16.28	82.64 ± 17.50	5.53 ± 4.58		14.11 ± 6.78	21.48 ± 9.96	43.54 ± 10.80	41.44 ± 13.16
NMO	136.29 ± 21.77	53.65± 14.13	58.63 ± 14.92	7.13 ± 4.48		10.91 ± 4.85	10.16 ± 6.16	39.87 ± 10.64	27.06 ± 10.78
IMO	57.07 ± 15.06	24.40± 10.52	25.09 ± 10.92	4.05 ± 3.67		6.82 ± 0.99	5.01 ± 0.12	32.18 ± 8.78	7.41 ± 4.66
3D 15M$_\odot$									
NO	91.44 ± 18.13	17.23 ± 9.29	22.06 ± 10.43	7.18 ± 5.33	18.35 ± 9.02		12.30 ± 8.02	116.50 ± 14.89	12.82 ± 9.27
NMO	61.51 ± 14.75	12.78 ± 8.38	14.64 ± 9.02	7.11 ± 4.45	15.99 ± 7.89		10.33 ± 7.01	100.95 ± 13.43	7.58 ± 4.90
IMO	19.01 ± 9.31	3.88 ± 4.41	4.63 ± 3.45	5.75 ± 4.74	7.30 ± 6.08		8.45 ± 6.26	72.40 ± 10.90	5.70± 2.13
3D 19M$_\odot$									
NO	101.25 ± 18.71	27.17 ± 10.74	26.88 ± 11.20	7.16 ± 6.73	28.78 ± 8.33	13.02 ± 8.80		100.27 ± 13.10	7.27 ± 4.32
NMO	80.05 ± 16.15	23.80 ± 9.88	22.76 ± 10.39	6.17 ± 5.59	20.88 ± 6.71	9.71 ± 7.35		79.60 ± 11.93	6.84 ± 3.60
IMO	43.87 ± 12.67	16.69 ± 8.83	13.62 ± 8.50	4.78 ± 4.40	6.77 ± 5.50	7.85 ± 6.96		48.74 ± 8.72	4.52 ± 3.92
3D 25M$_\odot$									
NO	363.83 ± 38.20	202.65 ± 26.23	216.27 ± 27.12	53.16 ± 14.87	29.4 ± 12.39	94.82 ± 18.85	78.17 ± 17.12		133.75 ± 21.33
NMO	287.47 ± 32.34	165.52 ± 23.64	172.64 ± 24.02	43.86 ± 14.12	25.03 ± 11.20	82.35 ± 17.67	58.98 ± 15.37		99.25 ± 18.92
IMO	160.22 ± 23.86	101.67 ± 18.64	101.63 ± 18.96	30.58 ± 11.42	22.72 ± 10.22	58.9 ± 14.79	30.96 ± 11.43		49.54 ± 13.63
3D 60M$_\odot$									
NO	59.88 ± 14.65	13.99 ± 8.17	9.91 ± 7.03	21.81 ± 8.28	60.04 ± 9.96	19.22 ± 8.55	7.31 ±4.83	144.65 ± 15.00	
NMO	49.02 ± 12.77	12.61 ± 7.03	9.24 ± 6.62	11.66 ± 7.03	38.96 ± 8.53	8.42 ± 6.20	6.90 ± 3.56	114.31 ± 13.51	
IMO	29.79 ± 10.88	11.08 ± 7.32	7.61 ± 6.59	7.47 ± 4.60	8.77 ± 3.38	6.34 ± 6.21	5.10 ± 5.26	65.50 ± 9.62	

Table 1. The mean Bayes factors along with standard deviations $\langle \ln \mathcal{B}_{\alpha\beta} \rangle \pm \sigma(\ln \mathcal{B}_{\alpha\beta})$ for a SN distance of 10kpc, regarding the mass ordering discrimination

HyperK - IBD			DUNE ν_e + Ar		DUNE75ms		JUNO IBD	
M_α / M_β	NMO	IMO	NMO	IMO	NMO	IMO	NMO	IMO
FS 11.2M$_\odot$								
NMO		432.78 ± 27.64		15.49 ± 3.93		9.17 ± 3.34		48.87 ± 9.17
IMO	409.73 ± 21.68		10.85 ± 5.50		7.81 ± 2.55		24.41 ± 10.49	
FT 11.2M$_\odot$								
NMO		501.91 ± 33.64		18.71 ± 4.08		15.33 ± 2.77		45.43 ± 9.50
IMO	466.47 ± 24.36		15.63 ± 6.022		9.77 ± 3.36		28.17 ± 11.04	
FT 15M$_\odot$								
NMO		1257.35 ± 52.99		33.54 ± 5.32		16.08± 3.45		96.67 ± 16.89
IMO	1055.17 ± 44.41		27.98 ± 7.49		11.52 ± 5.73		52.07 ± 14.85	
FT 27M$_\odot$								
NMO		1002.26 ± 41.43		30.14 ± 5.09		20.53 ± 3.76		82.04 ± 14.71
IMO	904.36 ± 43.56		29.96 ± 7.56		15.07 ± 3.43		55.28 ± 14.58	
LS 11.2M$_\odot$								
NMO		496.35 ± 17.41		18.24 ± 3.91		15.09 ± 2.97		52.22 ± 9.75
IMO	451.31 ± 34.49		18.12 ± 6.29		11.03 ± 2.56		31.00 ± 11.19	
LS 15M$_\odot$								
NMO		1078.59 ±44.40		46.61 ± 4.94		19.52 ± 3.31		91.26 ± 14.36
IMO	963.99 ± 44.66		21.97 ± 8.033		14.64 ± 2.32		53.22 ± 14.28	
LS 27M$_\odot$								
NMO		941.68 ± 36.82		42.09 ± 4.71		24.12 ± 3.59		93.91 ± 14.04
IMO	887.46 ± 44.26		29.49 ± 8.41		19.28 ± 2.20		44.57 ± 14.61	
3D 9M$_\odot$								
NMO		498.46 ± 46.72		11.96 ± 3.52		7.94 ± 1.71		36.07 ± 10.88
IMO	456.84 ± 28.94		7.18 ± 4.16		5.34 ± 2.80		24.15 ± 9.94	
3D 10M$_\odot$								
NMO		657.19 ± 41.93		14.68 ± 3.75		10.21 ± 1.43		41.33 ± 12.41
IMO	595.65 ± 31.92		14.5 ± 4.80		6.07 ± 3.11		36.75 ± 11.35	
3D 12M$_\odot$								
NMO		692.31 ± 39.48		15.11 ± 3.80		12.61 ± 1.30		42.25 ± 13.01
IMO	560.23 ± 32.08		13.67 ± 4.84		4.79 ± 3.21		37.32 ± 11.38	
3D 13M$_\odot$								
NMO		993.24 ± 51.52		32.54 ± 4.39		12.43 ± 0.91		65.45 ± 15.70
IMO	899.64 ± 38.48		18.2 ± 5.82		8.73 ± 3.62		47.53 ± 13.39	
3D 14M$_\odot$								
NMO		1118.6 ± 59.17		44.00 ± 4.55		12.52 ± 1.47		80.42 ± 17.02
IMO	1080.84 ± 40.24		17.94 ± 6.11		7.24 ± 3.48		47.72 ± 13.71	
3D 15M$_\odot$								
NMO		913.5 ± 50.07		24.13 ± 4.20		11.95 ± 1.37		63.59 ± 15.03
IMO	786.28 ± 36.20		17.51 ± 5.44		6.31± 3.35		38.01 ± 12.83	
3D 19M$_\odot$								
NMO		891.45 ± 48.41		21.29 ± 3.70		13.68 ± 2.61		60.48 ± 14.55
IMO	844.95 ± 36.73		19.25 ± 3.46		9.68 ± 2.90		44.62 ± 12.86	
3D 25M$_\odot$								
NMO		1426.57 ± 63.09		55.90 ± 5.17		19.66 ± 2.27		96.15 ± 19.35
IMO	1342.49 ± 45.90		39.24 ± 7.31		10.82 ± 3.70		65.75 ± 15.65	
3D 60M$_\odot$								
NMO		799.02 ± 42.44		21.14 ± 4.17		12.59 ± 2.66		60.84 ± 14.12
IMO	734.8 ± 34.98		17.04 ± 5.34		10.21 ± 2.82		30.42 ± 12.35	