

TABLE 1
Census of Supermassive Black Holes (2001 March)

Galaxy	Type	$M_{B,\text{bulge}}$	M_{\bullet} ($M_{\text{low}}, M_{\text{high}}$)	σ_e	D	r_{cusp}	Reference
			(M_{\odot})	(km/s)	(Mpc)	(arcsec)	
Galaxy	Sbc	-17.65	2.6 (2.4–2.8) e6	75	0.008	51.40	See notes
M 31	Sb	-19.00	4.5 (2.0–8.5) e7	160	0.76	2.06	Dressler + 1988; Kormendy 1988a
M 32	E2	-15.83	3.9 (3.1–4.7) e6	75	0.81	0.76	Tonry 1984, 1987
M 81	Sb	-18.16	6.8 (5.5–7.5) e7	143	3.9	0.76	Bower + 2001b
NGC 821	E4	-20.41	3.9 (2.4–5.6) e7	209	24.1	0.03	Gebhardt + 2001
NGC 1023	S0	-18.40	4.4 (3.8–5.0) e7	205	11.4	0.08	Bower + 2001a
NGC 2778	E2	-18.59	1.3 (0.5–2.9) e7	175	22.9	0.02	Gebhardt + 2001
NGC 3115	S0	-20.21	1.0 (0.4–2.0) e9	230	9.7	1.73	Kormendy + 1992
NGC 3377	E5	-19.05	1.1 (0.6–2.5) e8	145	11.2	0.42	Kormendy + 1998
NGC 3379	E1	-19.94	1.0 (0.5–1.6) e8	206	10.6	0.20	Gebhardt + 2000a
NGC 3384	S0	-18.99	1.4 (1.0–1.9) e7	143	11.6	0.05	Gebhardt + 2001
NGC 3608	E2	-19.86	1.1 (0.8–2.5) e8	182	23.0	0.13	Gebhardt + 2001
NGC 4291	E2	-19.63	1.9 (0.8–3.2) e8	242	26.2	0.11	Gebhardt + 2001
NGC 4342	S0	-17.04	3.0 (2.0–4.7) e8	225	15.3	0.34	Cretton + 1999a
NGC 4473	E5	-19.89	0.8 (0.4–1.8) e8	190	15.7	0.13	Gebhardt + 2001
NGC 4486B	E1	-16.77	5.0 (0.2–9.9) e8	185	16.1	0.81	Kormendy + 1997
NGC 4564	E3	-18.92	5.7 (4.0–7.0) e7	162	15.0	0.13	Gebhardt + 2001
NGC 4594	Sa	-21.35	1.0 (0.3–2.0) e9	240	9.8	1.58	Kormendy + 1988b
NGC 4649	E1	-21.30	2.0 (1.0–2.5) e9	375	16.8	0.75	Gebhardt + 2001
NGC 4697	E4	-20.24	1.7 (1.4–1.9) e8	177	11.7	0.41	Gebhardt + 2001
NGC 4742	E4	-18.94	1.4 (0.9–1.8) e7	90	15.5	0.10	Kaiser + 2001
NGC 5845	E	-18.72	2.9 (0.2–4.6) e8	234	25.9	0.18	Gebhardt + 2001
NGC 7457	S0	-17.69	3.6 (2.5–4.5) e6	67	13.2	0.05	Gebhardt + 2001
NGC 2787	SB0	-17.28	4.1 (3.6–4.5) e7	185	7.5	0.14	Sarzi + 2001
NGC 3245	S0	-19.65	2.1 (1.6–2.6) e8	205	20.9	0.21	Barth + 2001
NGC 4261	E2	-21.09	5.2 (4.1–6.2) e8	315	31.6	0.15	Ferrarese + 1996
NGC 4374	E1	-21.36	4.3 (2.6–7.5) e8	296	18.4	0.24	Bower + 1998
NGC 4459	SA0	-19.15	7.0 (5.7–8.3) e7	167	16.1	0.14	Sarzi + 2001
M 87	E0	-21.53	3.0 (2.0–4.0) e9	375	16.1	1.18	Harms + 1994
NGC 4596	SB0	-19.48	0.8 (0.5–1.2) e8	136	16.8	0.22	Sarzi + 2001
NGC 5128	S0	-20.80	2.4 (0.7–6.0) e8	150	4.2	2.26	Marconi + 2001
NGC 6251	E2	-21.81	6.0 (2.0–8.0) e8	290	106	0.06	Ferrarese + 1999
NGC 7052	E4	-21.31	3.3 (2.0–5.6) e8	266	58.7	0.07	van der Marel + 1998
IC 1459	E3	-21.39	2.0 (1.2–5.7) e8	323	29.2	0.06	Verdoes Kleijn + 2001
NGC 1068	Sb	-18.82	1.7 (1.0–3.0) e7	151	15	0.04	Greenhill + 1996
NGC 4258	Sbc	-17.19	4.0 (3.9–4.1) e7	120	7.2	0.36	Miyoshi + 1995
NGC 4945	Sed	-15.14	1.4 (0.9–2.1) e6		3.7		Greenhill + 1997

Notes – BH detections are based on stellar dynamics (top group), ionized gas dynamics (middle) and maser dynamics (bottom). Column 3 is the B -band absolute magnitude of the bulge part of the galaxy. Column 4 is the BH mass M_{\bullet} with error bars ($M_{\text{low}}, M_{\text{high}}$). Column 5 is the galaxy's velocity dispersion (see Figure 2). Column 6 is the distance (Tonry *et al.* 2001). Column 7 is the radius of the sphere of influence of the BH. References are the BH discovery papers (+ means *et al.*; for reviews of our Galaxy, see Kormendy & Richstone 1995; Yusef-Zadeh + 2000). BH masses are from the above papers except for our Galaxy (Genzel + 1997; Ghez + 1998), M 31 (Kormendy + 1999; Bacon + 2001), M 32 (van der Marel + 1998), NGC 3115 (Kormendy + 1996a; Emsellem + 1999), NGC 3377 (Gebhardt + 2001), NGC 4374 (Maciejewski + 2001); M 87 (Harms + 1994; Macchetto + 1997), and NGC 4486B (Green + 2001).