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# Erratum: Black hole masses of tidal disruption event host galaxies II

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**Key words:** errata, addenda – accretion, accretion discs – galaxies: bulges – galaxies: fundamental parameters – galaxies: kinematics and dynamics – galaxies: nuclei.

This is an erratum to the paper ‘Black hole masses of tidal disruption event host galaxies II’, published in MNRAS, 487, 4136 (2019).

Table 2 containing the new and archival velocity dispersion measurements and other physical quantities was truncated erroneously, resulting in most of the new measurements not being displayed. Here we rectify this by providing the entire table. The Arxiv version of the manuscript does include the entire table. This was a typesetting error; the results and conclusions remain unchanged.

**Table 1.** Measured properties of the sources used in this work.  $\sigma$  is the velocity dispersion (where an asterisk indicates the use of a fiber or galaxy wide extraction), and  $M_{\text{BH}}$  the derived black hole mass.  $M_g$  and  $\log(M_*)$  present the absolute g-band magnitude and total stellar mass of the host, respectively. These values are taken from van Velzen (2018) for the optical hosts, while for the X-ray hosts stellar masses are computed from SDSS photometry if available, and from PS1 photometry otherwise. BPT lists the classification in the BPT diagram for galaxies with detectable emission lines. Here Q stands for quiescent, Sy for Seyfert, SF for star-forming, C for composite SF + AGN and L for LINER.  $L_{\text{max}}$  provides the maximum *observed* X-ray luminosity for the X-ray events, while for the optical events the integrated blackbody luminosity at peak is given.  $R_{\text{BB}}$  provides the blackbody radius derived from  $L_{\text{max}}$ , and  $R_{\text{petro}}$  is the 90 % light radius taken from SDSS. The sources below the double horizontal line are the optical TDEs presented in Wevers et al. (2017). This Table is available in machine-readable form.

Name	$\sigma$ [km s <sup>-1</sup> ]	$\log(M_{\text{BH}})$ [M <sub>⊙</sub> ]	$M_g$ [mag]	$\log(M_*)$ [M <sub>⊙</sub> ]	BPT	$L_{\text{max}}$ [erg s <sup>-1</sup> ]	$R_{\text{BB}}$ [cm]	$R_{\text{petro}}$ [arcsec]	Notes
2MASX J0249	43 ± 4	4.93 <sup>+0.55</sup> <sub>-0.53</sub>	-17.5	9.1	SF/C	3.4 <sup>+3.6</sup> <sub>-3.0</sub> × 10 <sup>41</sup>	2.9 <sup>+3.3</sup> <sub>-3.1</sub> × 10 <sup>10</sup>	5.4	
3XMM J1500	59 ± 3*	5.64 <sup>+0.45</sup> <sub>-0.45</sub>	-19.1	9.3	SF	6.2 <sup>+1.6</sup> <sub>-1.3</sub> × 10 <sup>43</sup>	3.9 <sup>+3.9</sup> <sub>-3.9</sub> × 10 <sup>11</sup>	1.8	Lin et al. (2017)
3XMM J1521	58 ± 2	5.61 <sup>+0.41</sup> <sub>-0.41</sub>	-19.2	9.9	Q	3.2 <sup>+3.5</sup> <sub>-2.9</sub> × 10 <sup>43</sup>	2.8 <sup>+3.2</sup> <sub>-3.1</sub> × 10 <sup>11</sup>	1.7	
LEDA 095953	–	–	–	–	Q	5.4 <sup>+5.8</sup> <sub>-5.2</sub> × 10 <sup>42</sup>	–	–	mQBS
2MASX J1446	167 ± 15	7.84 <sup>+0.54</sup> <sub>-0.52</sub>	-19.6	9.8	Q	4 <sup>+2</sup> <sub>-2</sub> × 10 <sup>42</sup>	9.9 <sup>+10</sup> <sub>-10</sub> × 10 <sup>10</sup>	–	
NGC 5905	97 ± 5	6.69 <sup>+0.45</sup> <sub>-0.44</sub>	-20.2	10.0	SF/C	8.7 <sup>+9.3</sup> <sub>-8.1</sub> × 10 <sup>40</sup>	1.5 <sup>+1.7</sup> <sub>-1.6</sub> × 10 <sup>10</sup>	45.8	AGN?
RBS 1032	49 ± 7*	5.25 <sup>+0.67</sup> <sub>-0.62</sub>	-17.7	9.0	Q	5.0 <sup>+5.5</sup> <sub>-4.4</sub> × 10 <sup>41</sup>	3.5 <sup>+4.0</sup> <sub>-3.8</sub> × 10 <sup>10</sup>	4.0	
RX J1242A	–	–	-20.5	10.3	Q	4.0 <sup>+4.6</sup> <sub>-2.8</sub> × 10 <sup>42</sup>	–	11.3	

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Table 1 – continued

Name	$\sigma$ [km s <sup>-1</sup> ]	log(M <sub>BH</sub> ) [M <sub>⊙</sub> ]	M <sub>g</sub> [mag]	log(M <sub>*</sub> ) [M <sub>⊙</sub> ]	BPT	L <sub>max</sub> [erg s <sup>-1</sup> ]	R <sub>BB</sub> [cm]	R <sub>petro</sub> [arcsec]	Notes
RX J1420A	131 ± 13*	7.33 <sup>+0.56</sup> <sub>-0.54</sub>	-20.3	10.3	Q	2.4 <sup>+2.6</sup> <sub>-2.1</sub> × 10 <sup>43</sup>	2.4 <sup>+2.7</sup> <sub>-2.6</sub> × 10 <sup>11</sup>	3.7	
RX J1624	155 ± 9	7.68 <sup>+0.45</sup> <sub>-0.45</sub>	-20.8	10.4	Q	2.4 <sup>+2.5</sup> <sub>-2.3</sub> × 10 <sup>43</sup>	2.4 <sup>+2.7</sup> <sub>-2.7</sub> × 10 <sup>11</sup>	–	
SDSS J0159	124 ± 10	7.21 <sup>+0.52</sup> <sub>-0.50</sub>	-21.8	10.7	C	1.1 <sup>+1.1</sup> <sub>-1.0</sub> × 10 <sup>44</sup>	5.2 <sup>+5.8</sup> <sub>-5.7</sub> × 10 <sup>11</sup>	1.7	CL AGN?
SDSS J1201	122 ± 4	7.18 <sup>+0.41</sup> <sub>-0.41</sub>	-20.6	10.4	Q	1.0 <sup>+1.2</sup> <sub>-0.8</sub> × 10 <sup>45</sup>	1.6 <sup>+1.8</sup> <sub>-1.7</sub> × 10 <sup>12</sup>	4.2	
SDSS J1323	75 ± 4*	6.15 <sup>+0.46</sup> <sub>-0.45</sub>	-18.9	9.8	Q	2.0 <sup>+2.4</sup> <sub>-1.6</sub> × 10 <sup>44</sup>	7.0 <sup>+8.2</sup> <sub>-7.5</sub> × 10 <sup>11</sup>	4.8	
PGC 015259	–	–	-18.6	9.5	SF/C	1.6 × 10 <sup>44</sup>	–	–	
NGC 6021	187 ± 3	8.08 <sup>+0.37</sup> <sub>-0.37</sub>	-20.4	10.3	Sy	1.8 × 10 <sup>44</sup>	–	–	AGN
PGC 1127938	31 ± 2*	4.29 <sup>+0.55</sup> <sub>-0.54</sub>	-16.4	8.6	Q	2.5 × 10 <sup>44</sup>	7.8 <sup>+8.1</sup> <sub>-8.1</sub> × 10 <sup>11</sup>	8.6	
PGC 1185375	41 ± 7*	4.86 <sup>+0.46</sup> <sub>-0.45</sub>	-16.1	8.5	Q	4.2 × 10 <sup>43</sup>	3.2 <sup>+3.3</sup> <sub>-3.3</sub> × 10 <sup>11</sup>	20.3	
PGC 133344	173 ± 3	7.91 <sup>+0.38</sup> <sub>-0.38</sub>	-19.9	10.1	Q	3.5 × 10 <sup>44</sup>	9.3 <sup>+9.5</sup> <sub>-9.5</sub> × 10 <sup>11</sup>	–	
PGC 170392	169 ± 3	7.86 <sup>+0.38</sup> <sub>-0.38</sub>	–	–	Q	2.8 × 10 <sup>44</sup>	8.3 <sup>+8.5</sup> <sub>-8.5</sub> × 10 <sup>11</sup>	–	
UGC 1791	41 ± 4*	4.86 <sup>+0.56</sup> <sub>-0.54</sub>	-16.7	8.1	SF	3.0 × 10 <sup>44</sup>	8.6 <sup>+8.8</sup> <sub>-8.8</sub> × 10 <sup>11</sup>	–	
ASASSN15–lh	210 ± 7	8.32 <sup>+0.41</sup> <sub>-0.41</sub>	-21.4	10.8	L	4.2 <sup>+1.0</sup> <sub>-0.9</sub> × 10 <sup>45</sup>	3.9 <sup>+0.9</sup> <sub>-0.9</sub> × 10 <sup>15</sup>	–	
ASASSN15–oi	61 ± 7	5.71 <sup>+0.60</sup> <sub>-0.57</sub>	-19.3	9.9	Q	2.8 <sup>+0.7</sup> <sub>-0.6</sub> × 10 <sup>44</sup>	1.0 <sup>+0.2</sup> <sub>-0.2</sub> × 10 <sup>15</sup>	–	L <sub>X</sub> = 3.1 <sup>+3.7</sup> <sub>-2.7</sub> × 10 <sup>41</sup>
DES14C1kia	–	–	-20.1	10.1	Q	–	–	–	mQBS?
GALEX D1–9	65 ± 6	5.85 <sup>+0.54</sup> <sub>-0.53</sub>	-20.0	10.3	Q	1.2 <sup>+0.3</sup> <sub>-0.3</sub> × 10 <sup>44</sup>	1.3 <sup>+0.3</sup> <sub>-0.3</sub> × 10 <sup>14</sup>	2.8	
GALEX D23–H1	84 ± 4*	6.39 <sup>+0.44</sup> <sub>-0.44</sub>	-20.1	10.3	SF	9 <sup>+3</sup> <sub>-2</sub> × 10 <sup>43</sup>	1.5 <sup>+0.4</sup> <sub>-0.4</sub> × 10 <sup>14</sup>	2.1	
PS1–11af	–	–	-20.1	10.1	Q	7.2 <sup>+0.8</sup> <sub>-0.7</sub> × 10 <sup>43</sup>	–	1.3	
SDSS TDE2	–	–	-20.6	10.6	Q	1.0 <sup>+0.1</sup> <sub>-0.1</sub> × 10 <sup>44</sup>	–	3.2	
ASASSN–14li	81 ± 2	6.23 <sup>+0.39</sup> <sub>-0.40</sub>	-18.8	9.6	Q	6.2 <sup>+1.4</sup> <sub>-1.2</sub> × 10 <sup>43</sup>	2.4 <sup>+0.5</sup> <sub>-0.5</sub> × 10 <sup>14</sup>	3.1	L <sub>X</sub> = 1.1 <sup>+1.1</sup> <sub>-1.0</sub> × 10 <sup>43</sup>
ASASSN–14ae	53 ± 2	5.42 <sup>+0.46</sup> <sub>-0.46</sub>	-19.2	9.8	Q	7.5 <sup>+1.6</sup> <sub>-1.4</sub> × 10 <sup>43</sup>	7 <sup>+1.5</sup> <sub>-1.5</sub> × 10 <sup>14</sup>	5.0	
GALEX D3–13	133 ± 6*	7.36 <sup>+0.43</sup> <sub>-0.44</sub>	-20.8	10.7	Q	2.0 <sup>+0.2</sup> <sub>-0.2</sub> × 10 <sup>44</sup>	2.2 <sup>+0.2</sup> <sub>-0.2</sub> × 10 <sup>14</sup>	1.7	
PTF–09ge	82 ± 2	6.31 <sup>+0.39</sup> <sub>-0.39</sub>	-19.5	10.1	Q	1.3 <sup>+0.3</sup> <sub>-0.3</sub> × 10 <sup>44</sup>	9 <sup>+2</sup> <sub>-2</sub> × 10 <sup>14</sup>	5.5	
PTF–09axc	60 ± 4	5.68 <sup>+0.48</sup> <sub>-0.49</sub>	-20.2	10.0	Q	3.1 <sup>+0.4</sup> <sub>-0.4</sub> × 10 <sup>43</sup>	1.45 <sup>+0.03</sup> <sub>-0.03</sub> × 10 <sup>15</sup>	2.5	
PTF–09djl	64 ± 7	5.82 <sup>+0.56</sup> <sub>-0.58</sub>	-19.6	10.1	Q	2.5 <sup>+0.6</sup> <sub>-0.5</sub> × 10 <sup>44</sup>	9 <sup>+2</sup> <sub>-2</sub> × 10 <sup>14</sup>	2.0	
iPTF–15af	106 ± 2	6.88 <sup>+0.38</sup> <sub>-0.38</sub>	-17.9	10.2	Q	1.2 <sup>+1.1</sup> <sub>-0.5</sub> × 10 <sup>44</sup>	2.0 <sup>+1.3</sup> <sub>-1.3</sub> × 10 <sup>14</sup>	4.5	
iPTF–16axa	82 ± 3	6.34 <sup>+0.42</sup> <sub>-0.42</sub>	-19.4	10.1	Q	3.3 <sup>+0.9</sup> <sub>-0.7</sub> × 10 <sup>44</sup>	7.6 <sup>+1.5</sup> <sub>-1.5</sub> × 10 <sup>14</sup>	3.2	mQBS
iPTF–16fnl	55 ± 2	5.50 <sup>+0.42</sup> <sub>-0.42</sub>	-19.8	9.8	Q	3.3 <sup>+0.9</sup> <sub>-0.7</sub> × 10 <sup>43</sup>	1.8 <sup>+0.4</sup> <sub>-0.4</sub> × 10 <sup>14</sup>	10.4	
PS1–10jh	65 ± 3	5.85 <sup>+0.44</sup> <sub>-0.44</sub>	-18.1	9.5	Q	1.6 <sup>+0.3</sup> <sub>-0.3</sub> × 10 <sup>43</sup>	5.7 <sup>+0.9</sup> <sub>-0.9</sub> × 10 <sup>14</sup>	1.8	
SDSS TDE1	126 ± 7	7.25 <sup>+0.45</sup> <sub>-0.46</sub>	-19.2	10.1	Q	3.0 <sup>+1.0</sup> <sub>-0.8</sub> × 10 <sup>43</sup>	3.6 <sup>+0.1</sup> <sub>-0.1</sub> × 10 <sup>14</sup>	2.1	

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