Introduction to Galaxy Formation and Evolution

From Primordial Gas to Present-Day Galaxies

- Errata -

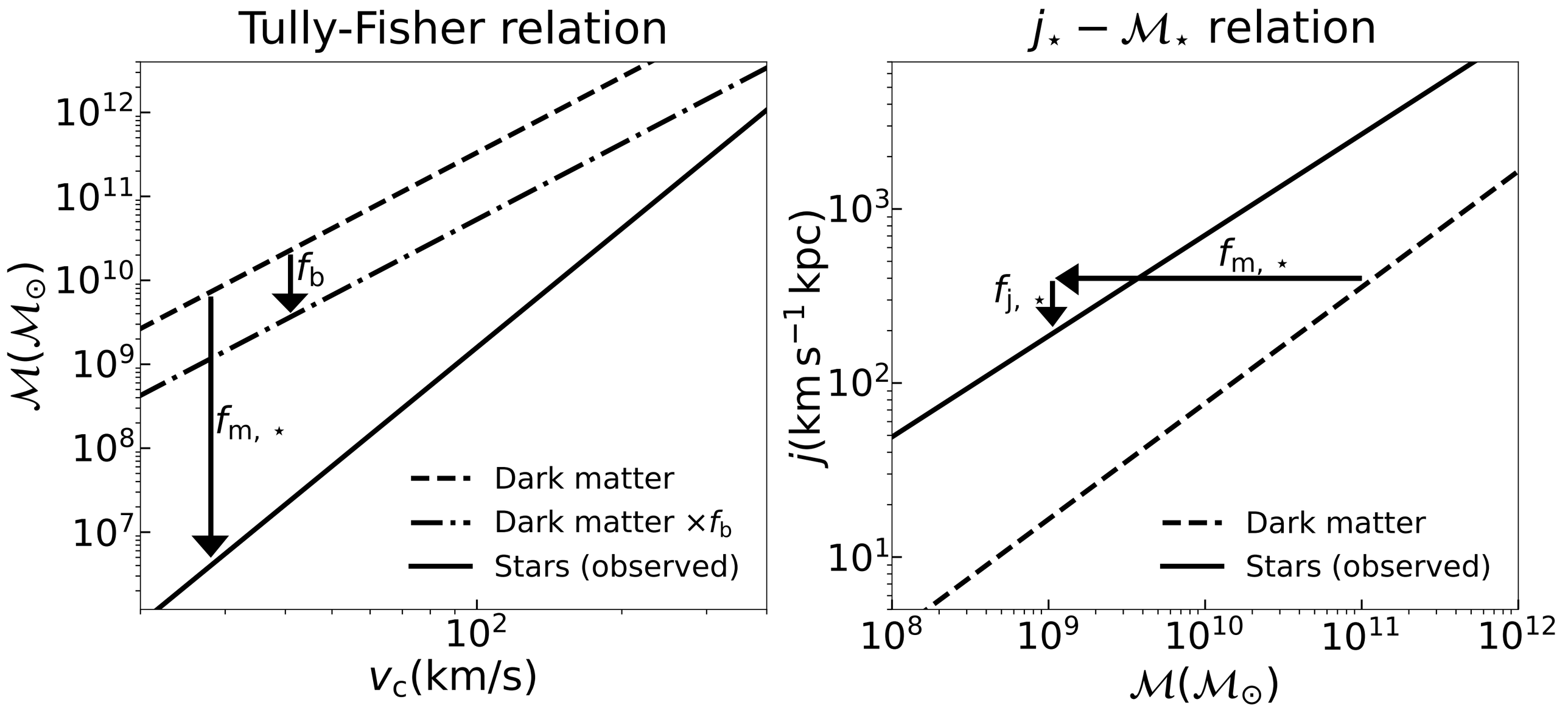
Andrea Cimatti, Filippo Fraternali and Carlo Nipoti

List of errata in the first printing

Updated: 10 May 2022

- §4.6.1, p. 110:
  $h_\star \approx 900$ kpc $\rightarrow$ $h_\star \approx 1$ kpc
- §6.3.1, p. 168, Table 6.2 (line "Metallicity([Fe/H])", rightmost column):
  -1 to -2.7 $\rightarrow$ -1.8 to -2.7.
- §8.2.1, p. 234:
  of an isothermal self-gravitating unmagnetised gas $\rightarrow$ of a self-gravitating unmagnetised gas
- §8.5.1, p. 271 (beginning of second paragraph):
  from the theory of stellar evolution (§C.5) $\rightarrow$ from the theory of stellar evolution (Tab. 8.1 and §C.5)
- Table 8.1, p. 272 (4th line excluding header):
  24-250 $\rightarrow$ 24-259
- Table 8.1, p. 272 (8th line excluding header):
  $\leq 9 \rightarrow \leq 10$
- §10.10.3, p. 410, eq. (10.17):
  $H(z)^2 \rightarrow H^2(z)$.
- §10.10.3, p. 410, Fig. 10.22 must be replaced (see below).
- §10.10.3, p. 411, second paragraph:
  The arrow in the plot indicates their combined effect. $\rightarrow$ The arrows in the plot indicate their effects.
- §11.2.6, p. 456:
  described in §11.2.5 and §11.2.6 $\rightarrow$ described in §11.2.5 and in this section

- Appendix B, p. 500, Table B.1 (line "Boltzmann constant"):
  1.38064852(79) → 1.380649
- Appendix B, p. 500, Table B.2 (line "Boltzmann constant"):
  1.38064852(79) → 1.380649
- Appendix B, p. 500, Table B.1 (line "Planck constant"):
  6.626070040(81) → 6.62607015
- Appendix B, p. 500, Table B.2 (line "Planck constant"):
  6.626070040(81) → 6.62607015
- Appendix B, p. 500, Table B.1 (line "Elementary charge"):
  4.80320425(10) → 4.80320471257
- Appendix B, p. 500, Table B.2 (line "Elementary charge"):
  1.6021766208(98) → 1.602176634
- Index, p. 560 (right-hand column, below "Fanaroff-Riley...." and above "fast rotators..."), please add the following item:
  Faraday rotation, 82


Tully-Fisher relation
$\mathcal{M}(\mathcal{M}_\odot)$
10^{12}
10^{11}
10^{10}
10^{9}
10^{8}
10^{7}
$f_{\rm b}$
$f_{\rm m,\,\star}$
Dark matter
Dark matter $\times f_{\rm b}$
Stars (observed)
10^2
$v_{\rm c}$(km/s)
$j_\star - \mathcal{M}_\star$ relation
j(km s^{-1} kpc)
10^3
10^2
10^1
$f_{\rm m,\,\star}$
$f_{\rm j,\,\star}$
Dark matter
Stars (observed)
10^8
10^9
10^{10}
10^{11}
10^{12}
$\mathcal{M}(\mathcal{M}_\odot)$