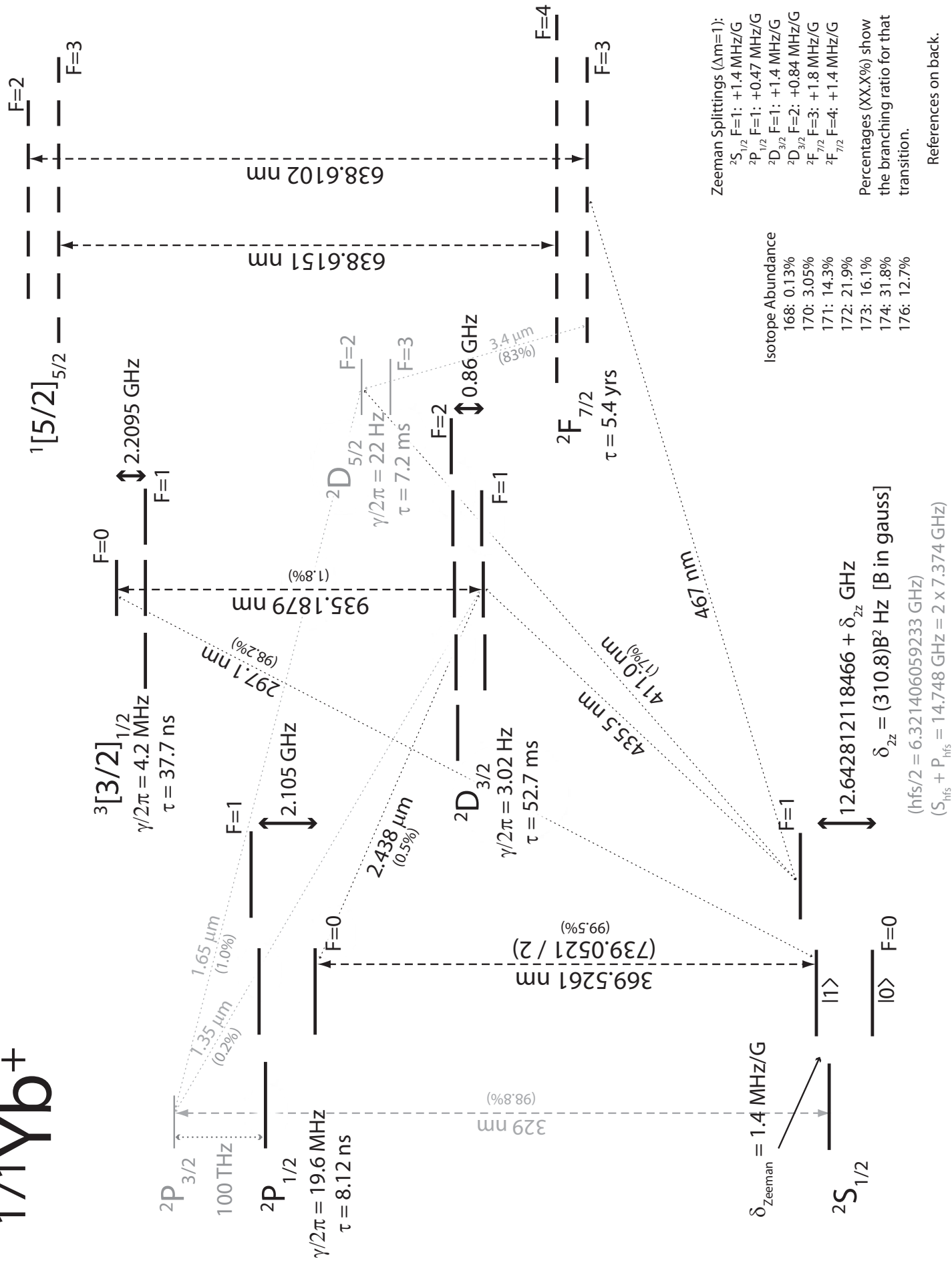


$^{171}\text{Yb}^+$



Zeeman Splittings ($\Delta m=1$):

- $2S_{1/2}$ $F=1$: +1.4 MHz/G
- $2P_{1/2}$ $F=1$: +0.47 MHz/G
- $2D_{3/2}$ $F=1$: +1.4 MHz/G
- $2D_{3/2}$ $F=2$: +0.84 MHz/G
- $2F_{7/2}$ $F=3$: +1.8 MHz/G
- $2F_{7/2}$ $F=4$: +1.4 MHz/G

Isotope Abundance

- 168: 0.13%
- 170: 3.05%
- 171: 14.3%
- 172: 21.9%
- 173: 16.1%
- 174: 31.8%
- 176: 12.7%

Percentages (XX.X%) show the branching ratio for that transition.

References on back.

$\delta_{\text{Zz}} = (310.8)\text{B}^2\text{ Hz} + \delta_{\text{Zz}}$

$(\text{hfs}/2 = 6.321406059233\text{ GHz})$

$(S_{\text{hfs}} + P_{\text{hfs}} = 14.748\text{ GHz} = 2 \times 7.374\text{ GHz})$

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Source: <https://iontrap.physics.indiana.edu/papers/YbLevelScheme.pdf>