

Table of Isotopes (1998)

Z=0-28 Part 1 of 2

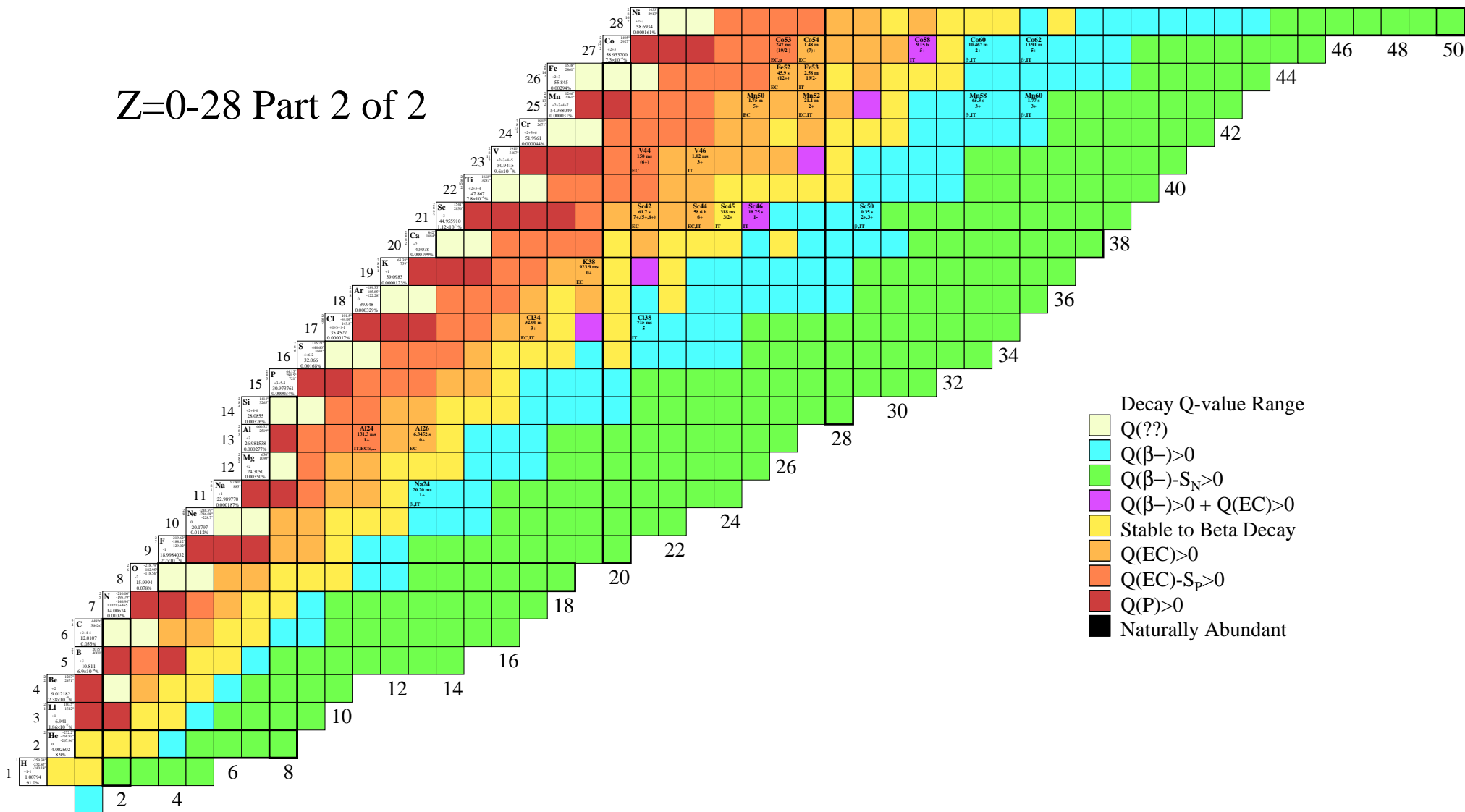
The table displays isotopes for elements with atomic number Z from 0 to 28. Each cell contains the element symbol, atomic number (Z), mass number (A), and a color-coded decay Q-value range. The color key is as follows:

- Q(??)
- Q(β^-)>0
- Q(β^-)-S_N>0
- Q(β^-)>0 + Q(EC)>0
- Stable to Beta Decay
- Q(EC)>0
- Q(EC)-S_p>0
- Q(P)>0
- Naturally Abundant

Additional data provided for each isotope includes its half-life (T_{1/2}) and spin-parity (J^π). The table is organized by element and then by mass number (A) for each element.

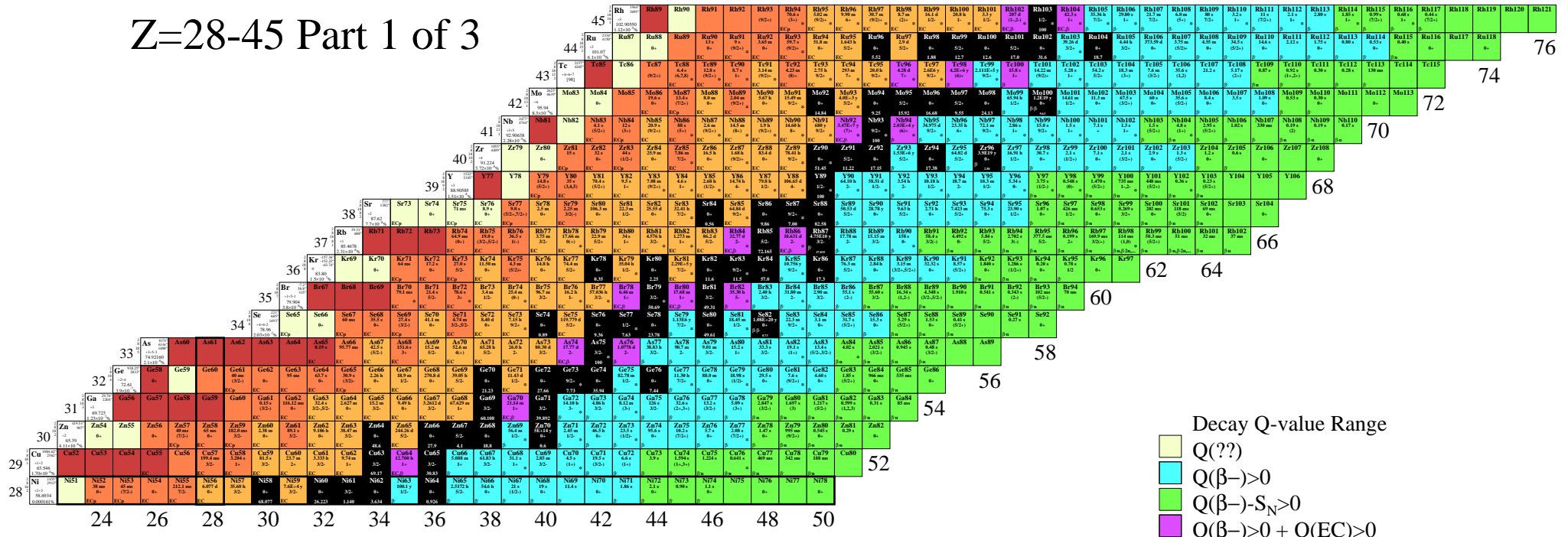
- Decay Q-value Range
- Q(??)
 - Q(β^-)>0
 - Q(β^-)-S_N>0
 - Q(β^-)>0 + Q(EC)>0
 - Stable to Beta Decay
 - Q(EC)>0
 - Q(EC)-S_p>0
 - Q(P)>0
 - Naturally Abundant

Z=0-28 Part 2 of 2



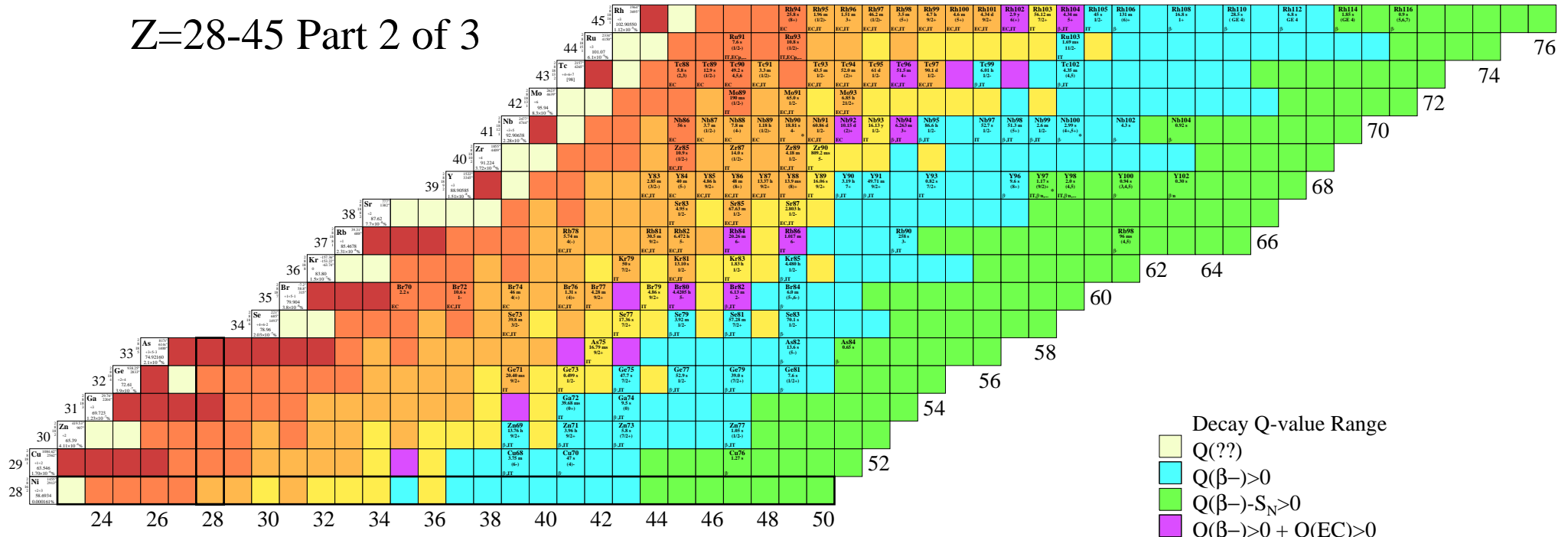
- Decay Q-value Range
- Q(??)
 - Q(β⁻) > 0
 - Q(β⁻) - S_N > 0
 - Q(β⁻) > 0 + Q(EC) > 0
 - Stable to Beta Decay
 - Q(EC) > 0
 - Q(EC) - S_p > 0
 - Q(P) > 0
 - Naturally Abundant

Z=28-45 Part 1 of 3



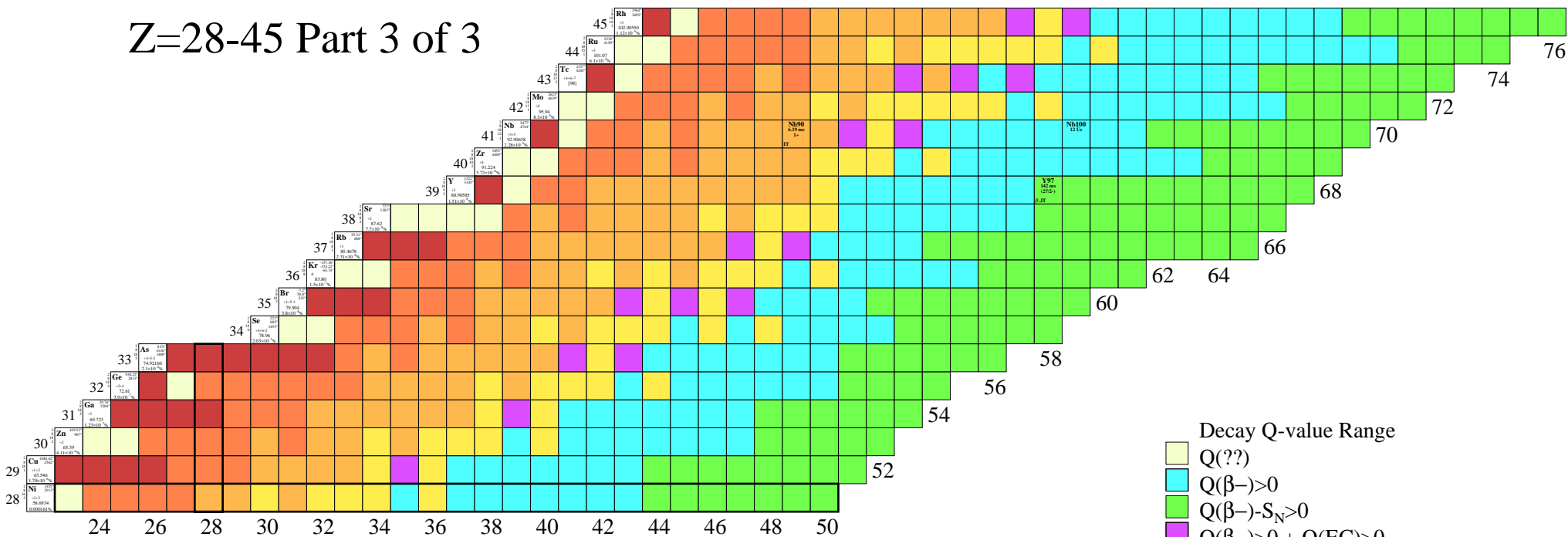
- Decay Q-value Range**
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=28-45 Part 2 of 3



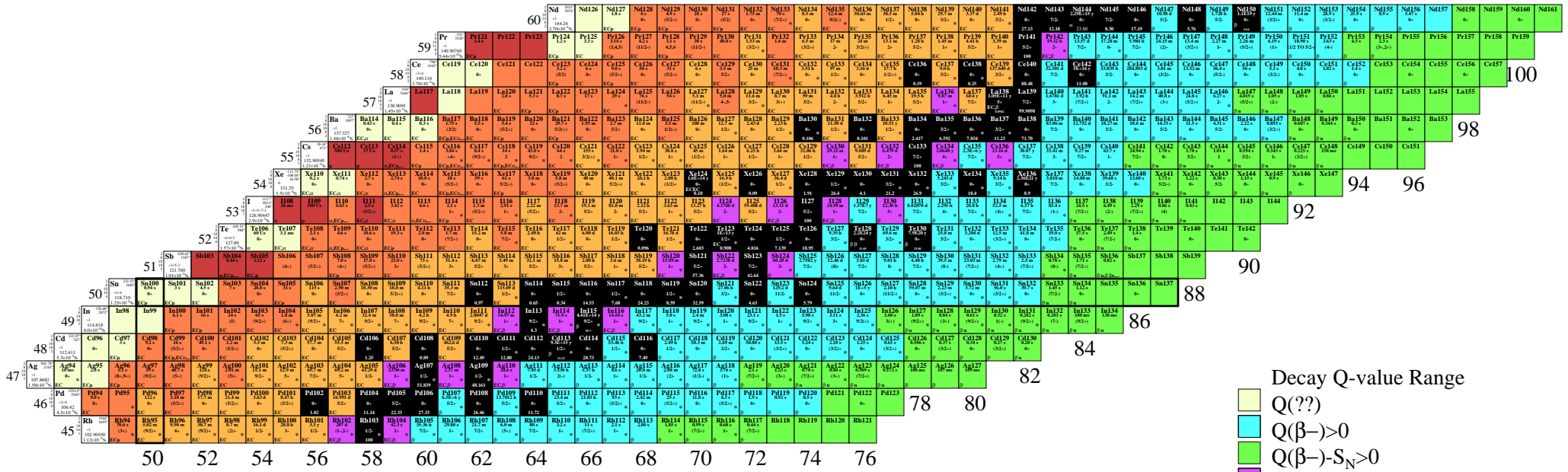
- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=28-45 Part 3 of 3



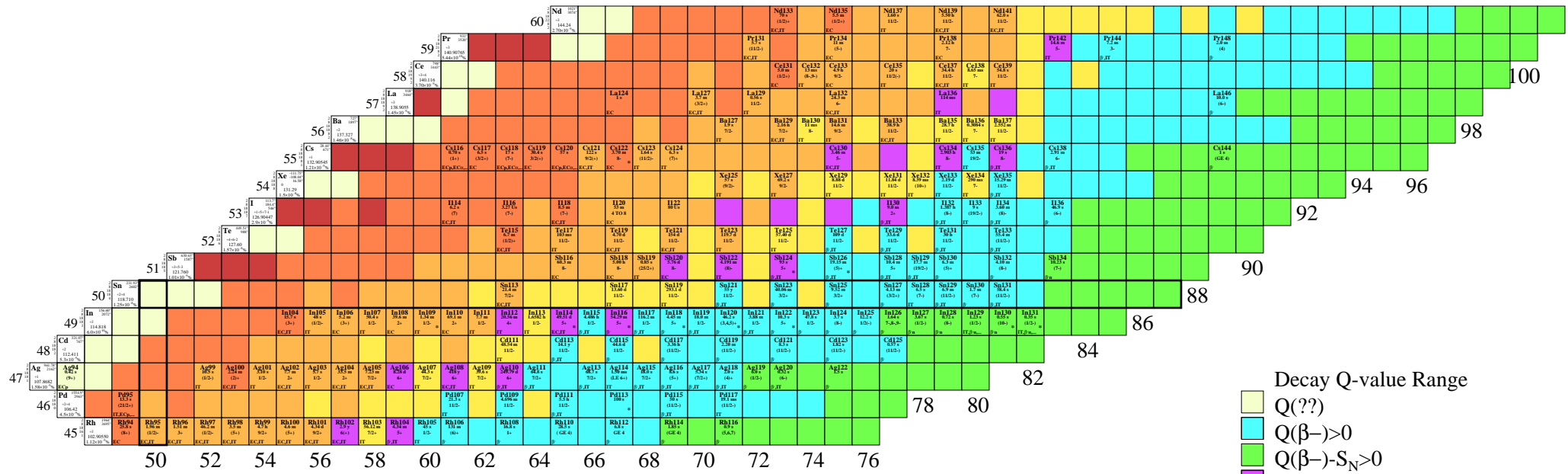
- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=45-60 Part 1 of 3



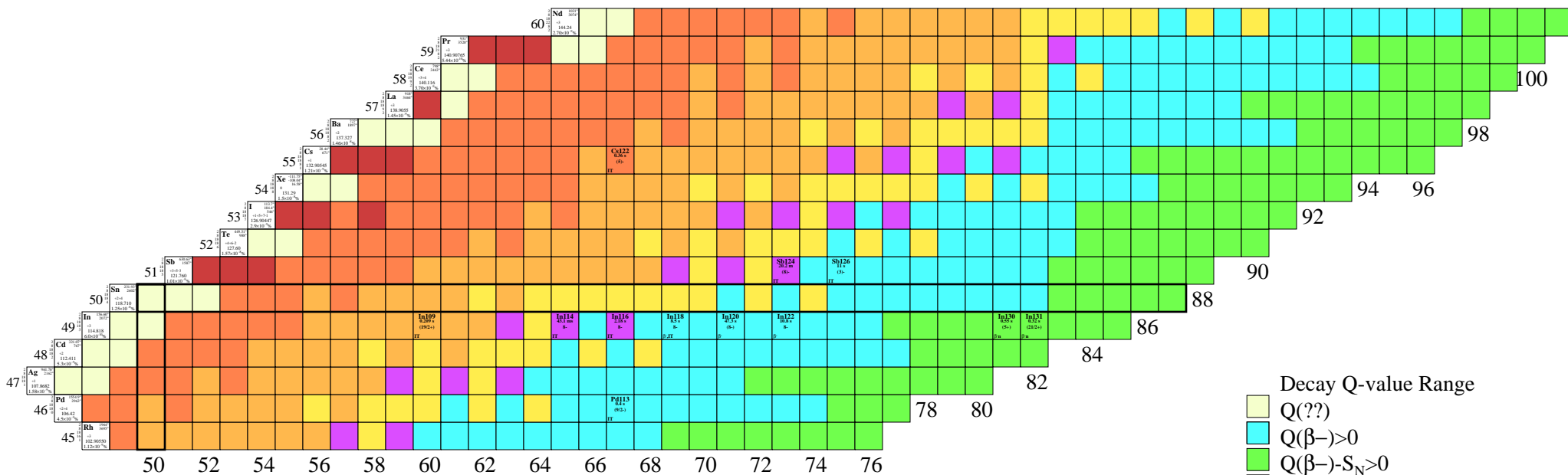
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=45-60 Part 2 of 3



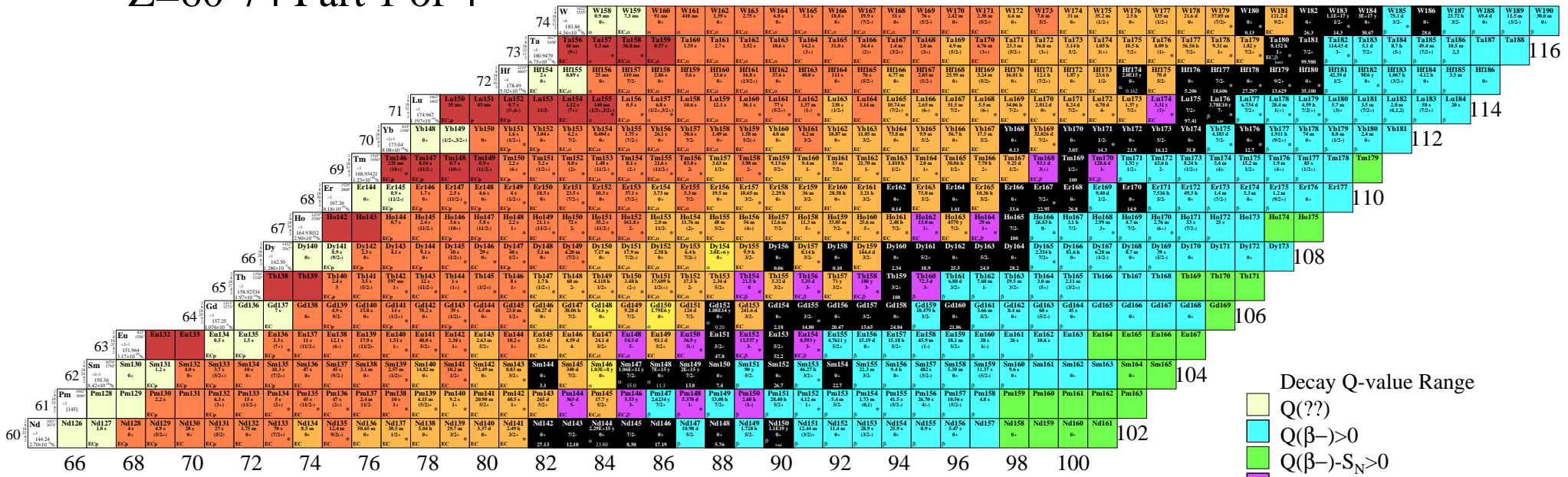
- Decay Q-value Range
- Yellow: Q(β-)>0
 - Green: Q(β-)-S_N>0
 - Purple: Q(β-)>0 + Q(EC)>0
 - Orange: Stable to Beta Decay
 - Light Orange: Q(EC)>0
 - Dark Orange: Q(EC)-S_p>0
 - Red: Q(P)>0
 - Black: Naturally Abundant

Z=45-60 Part 3 of 3



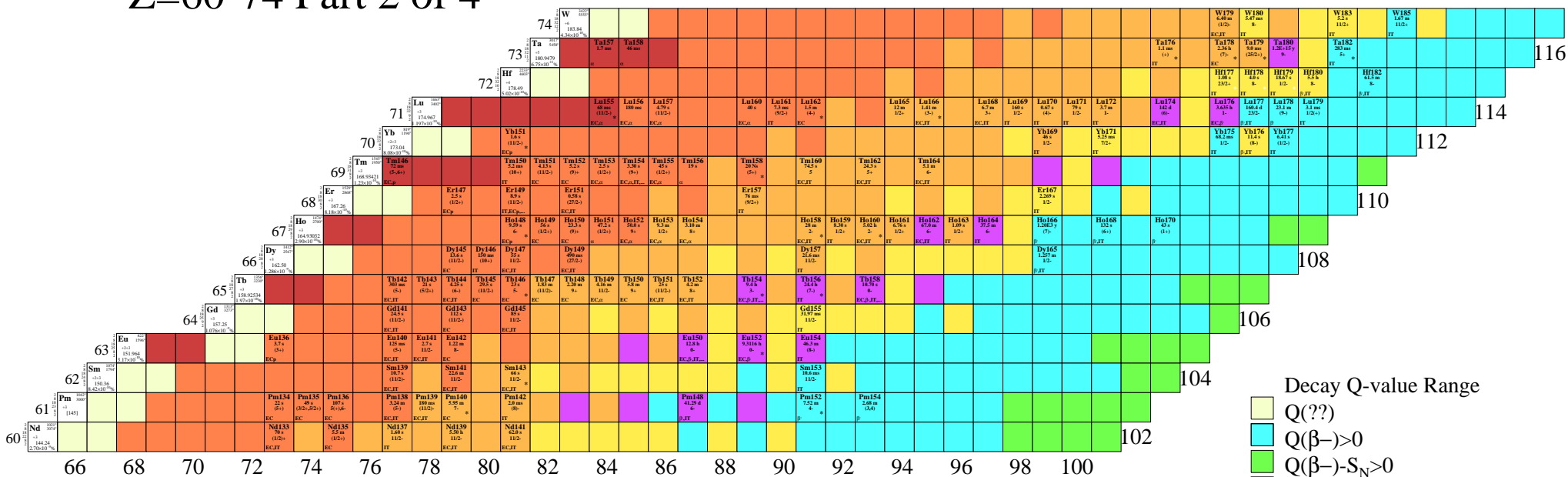
- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=60-74 Part 1 of 4



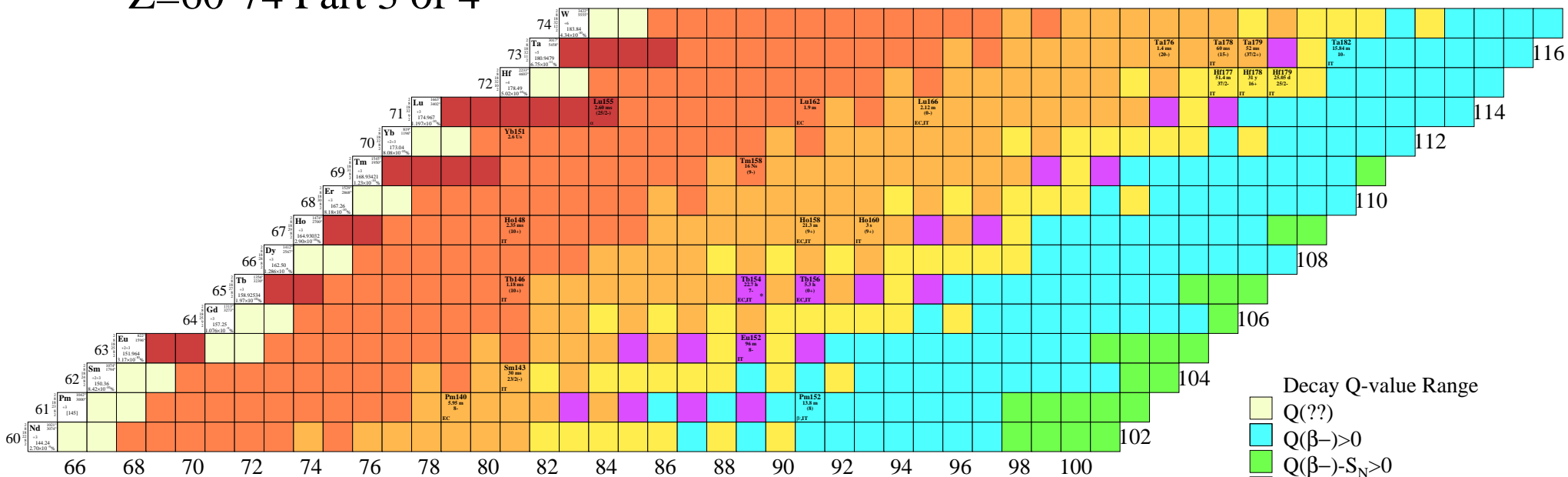
- Decay Q-value Range
- Q(?)
 - Q(β⁻) > 0
 - Q(β⁻) - S_N > 0
 - Q(β⁻) > 0 + Q(EC) > 0
 - Stable to Beta Decay
 - Q(EC) > 0
 - Q(EC) - S_p > 0
 - Q(P) > 0
 - Naturally Abundant

Z=60-74 Part 2 of 4



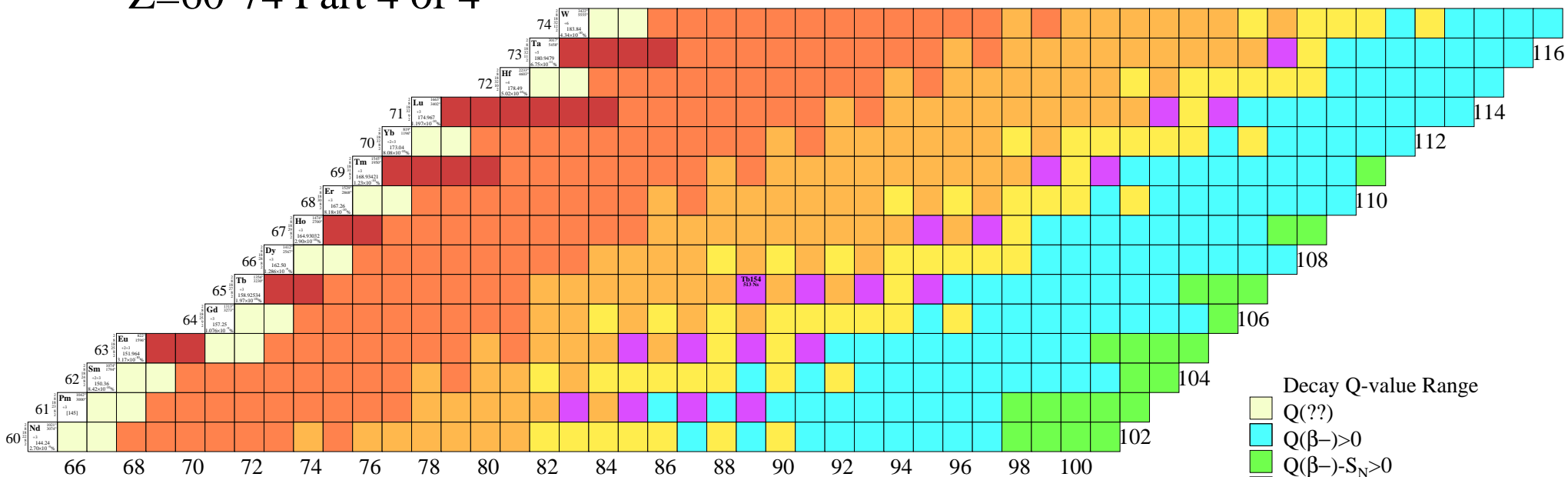
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=60-74 Part 3 of 4



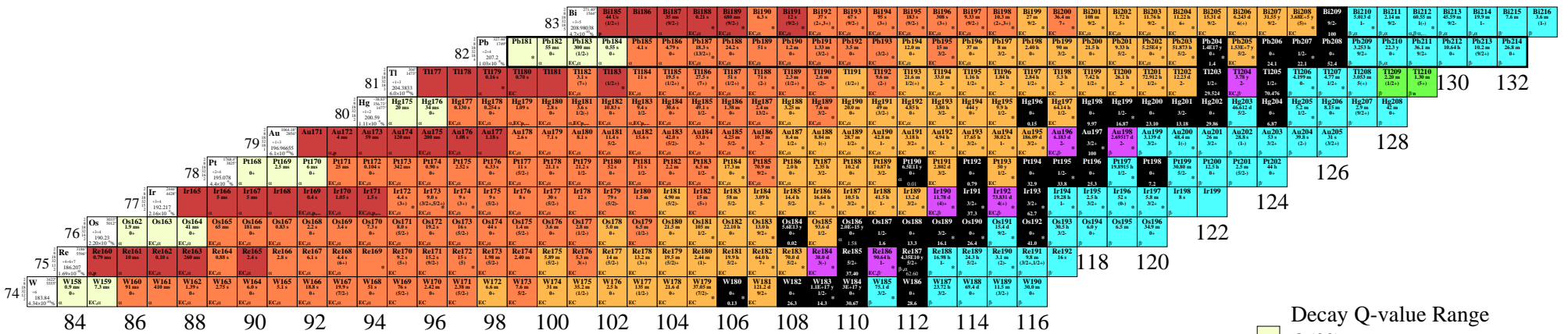
- Decay Q-value Range
- Q(??)
 - Q(β-) > 0
 - Q(β-) - S_N > 0
 - Q(β-) > 0 + Q(EC) > 0
 - Stable to Beta Decay
 - Q(EC) > 0
 - Q(EC) - S_p > 0
 - Q(P) > 0
 - Naturally Abundant

Z=60-74 Part 4 of 4



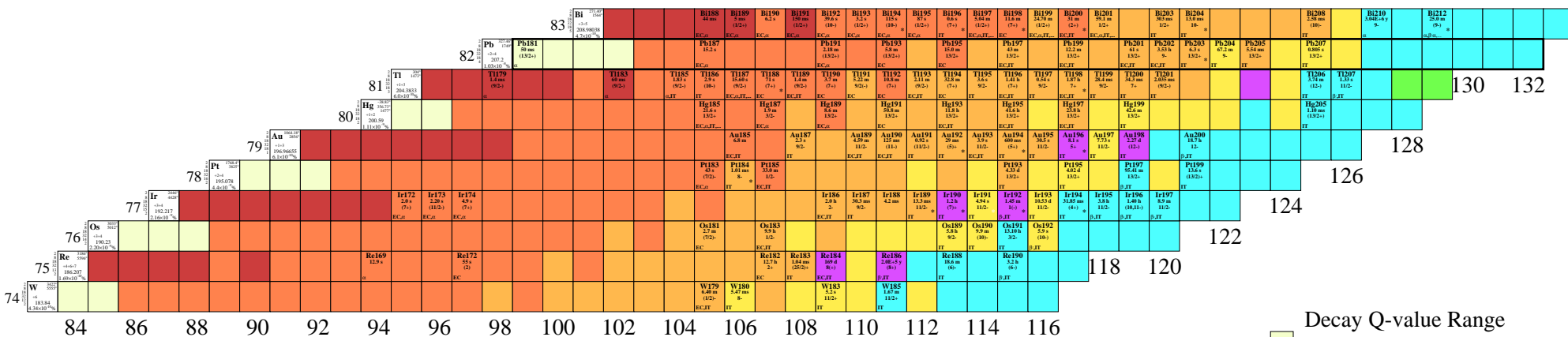
- Decay Q-value Range
- Q(??)
 - Q(β⁻)>0
 - Q(β⁻)-S_N>0
 - Q(β⁻)>0 + Q(EC)>0
 - Stable to Beta Decay
 - Q(EC)>0
 - Q(EC)-S_p>0
 - Q(P)>0
 - Naturally Abundant

Z=74-83 Part 1 of 3



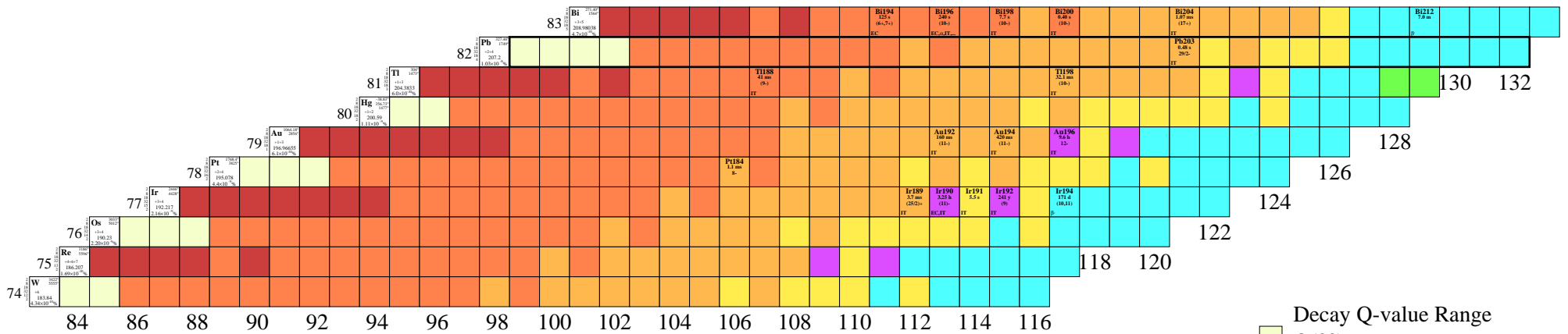
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=74-83 Part 2 of 3



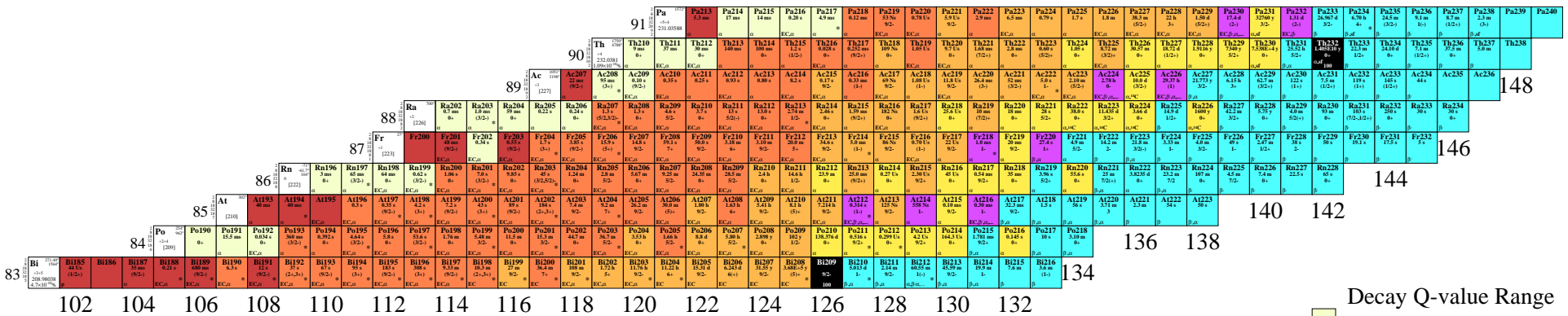
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=74-83 Part 3 of 3



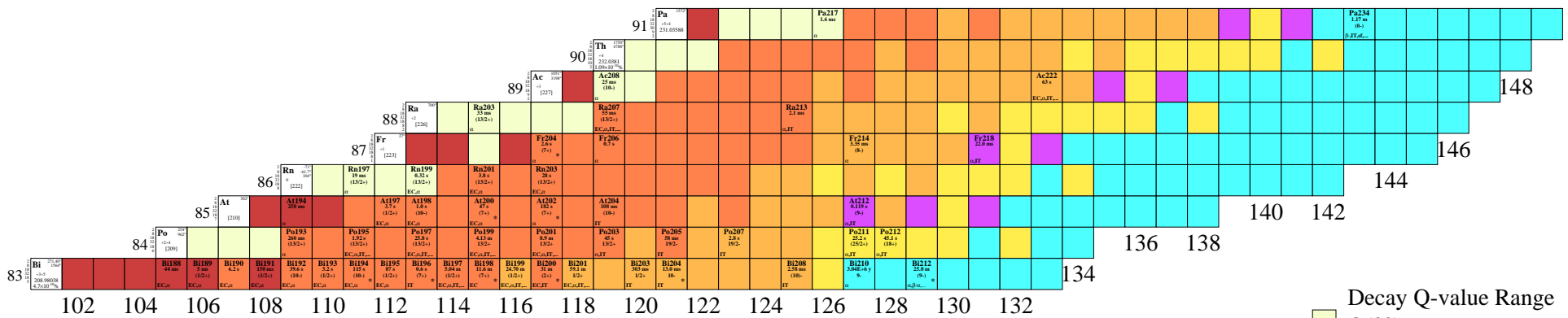
- Decay Q-value Range
- $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(\text{EC}) > 0$
 - Stable to Beta Decay
 - $Q(\text{EC}) > 0$
 - $Q(\text{EC}) - S_p > 0$
 - $Q(\text{P}) > 0$
 - Naturally Abundant

Z=83-91 Part 1 of 3



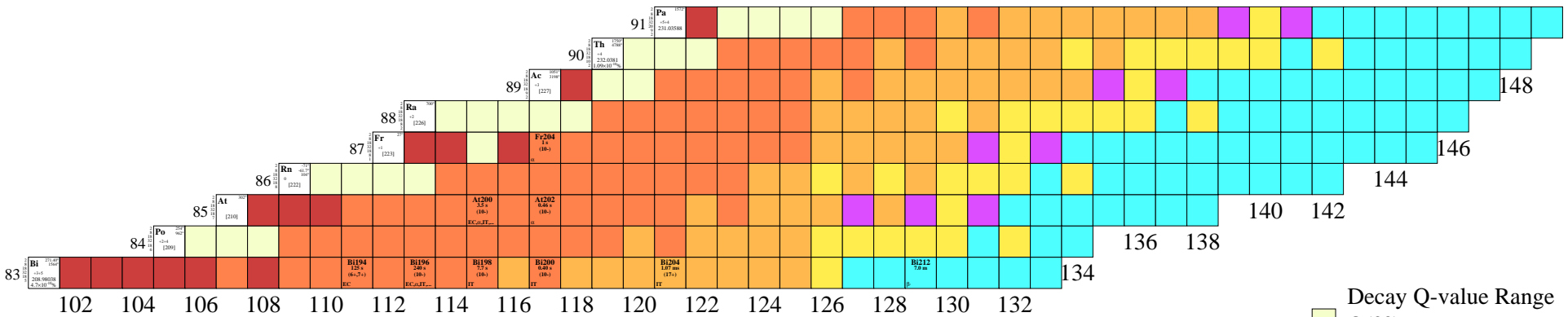
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=83-91 Part 2 of 3



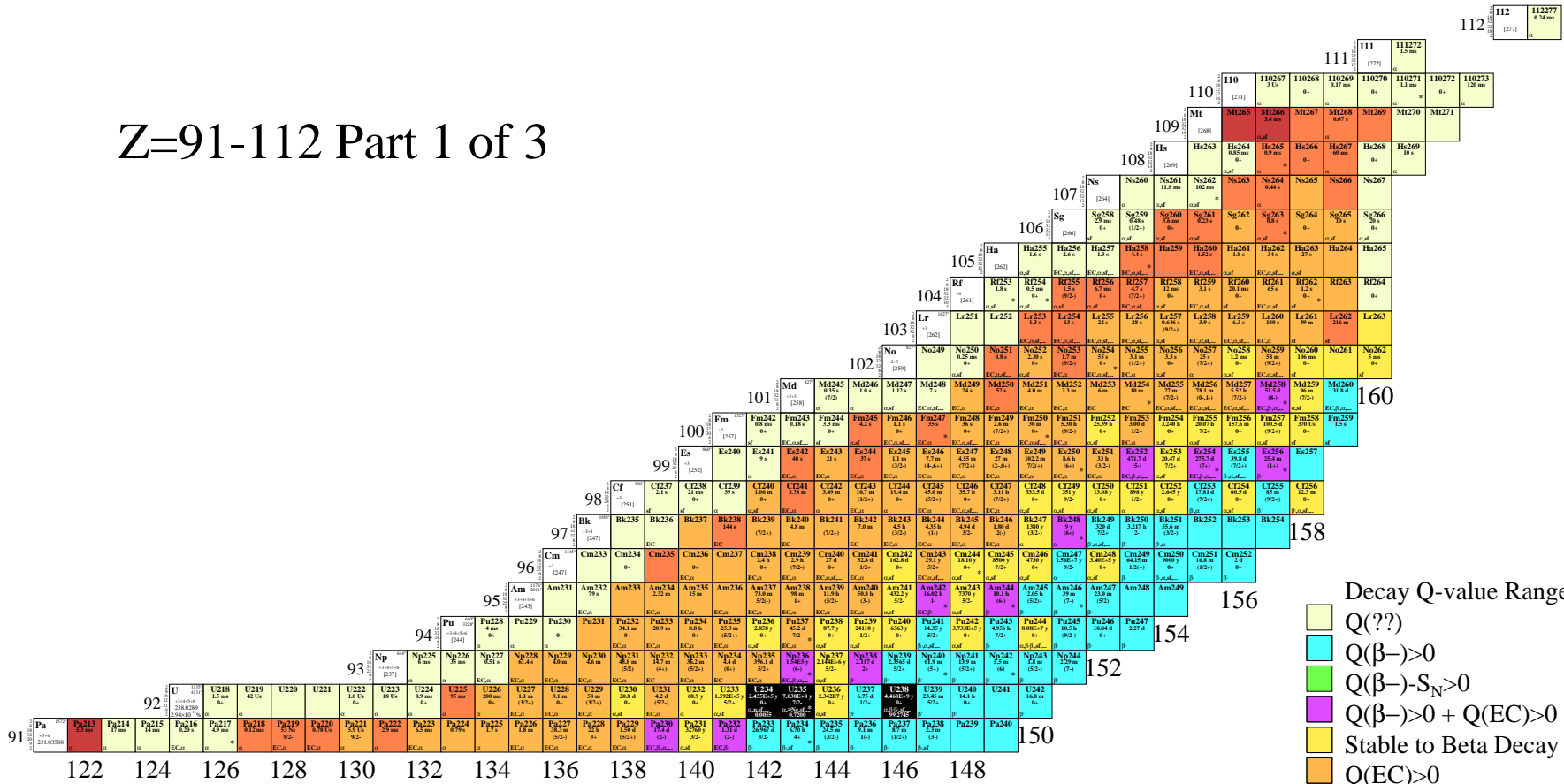
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=83-91 Part 3 of 3



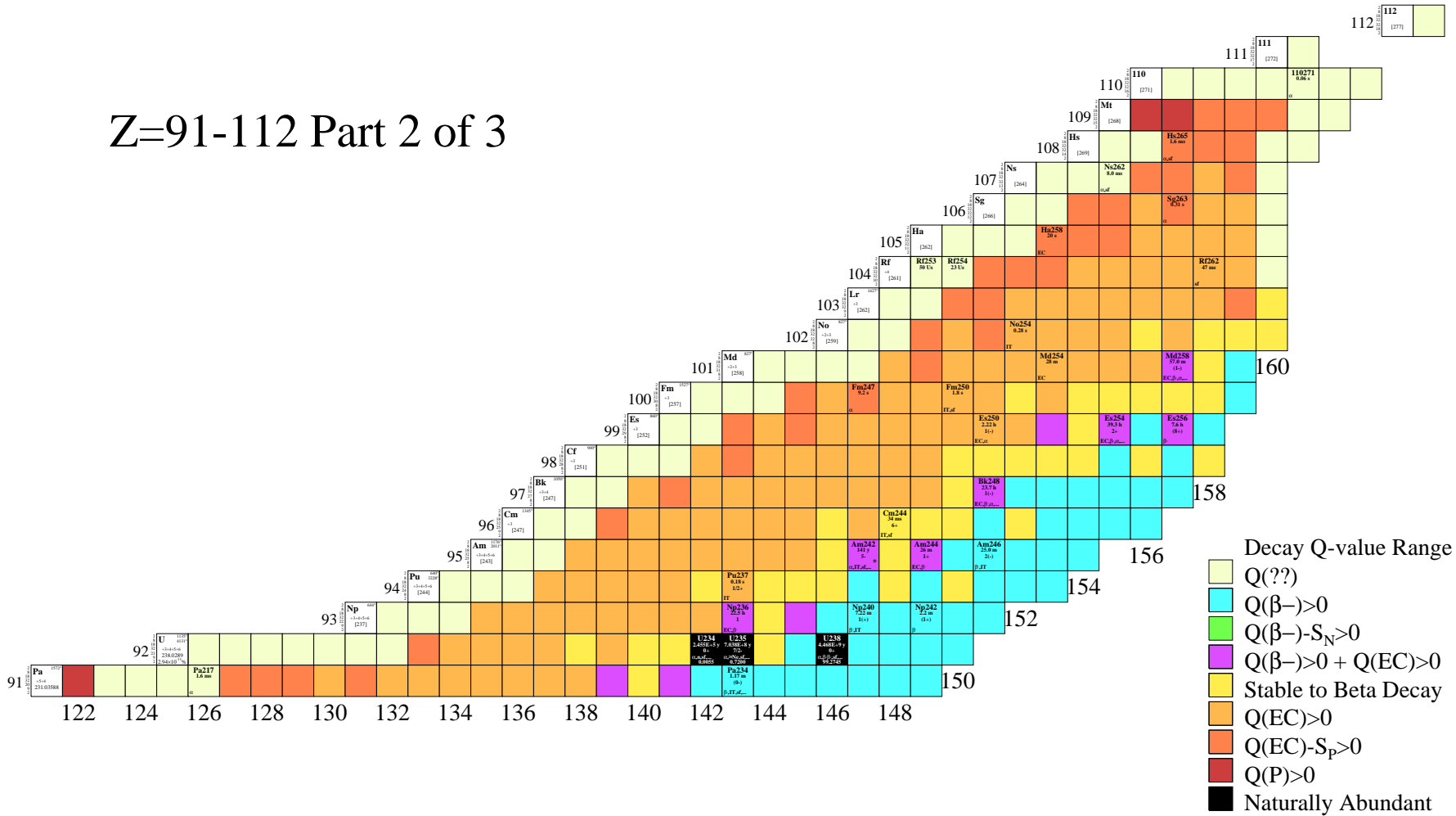
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=91-112 Part 1 of 3



- Decay Q-value Range
- Q(??)
 - Q(β⁻)>0
 - Q(β⁻)-S_N>0
 - Q(β⁻)>0 + Q(EC)>0
 - Stable to Beta Decay
 - Q(EC)>0
 - Q(EC)-S_p>0
 - Q(P)>0
 - Naturally Abundant

Z=91-112 Part 2 of 3



Z=91-112 Part 3 of 3

