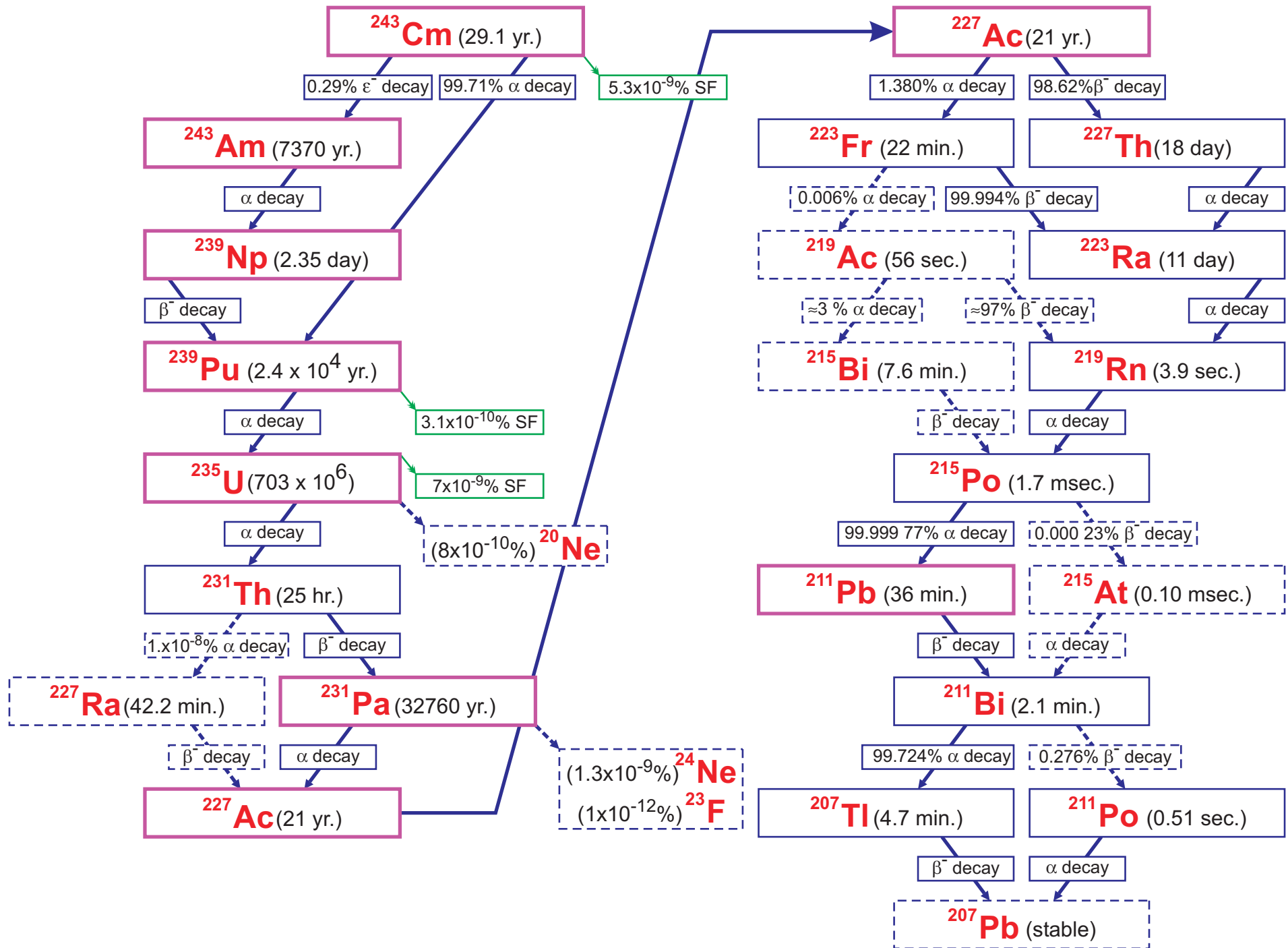


**$^{243}\text{Cm}$  (29.1 yr.)**  
7-1-2000  
HPGe: 50.5 mm dia. X 20.5 mm  
none  
20cm  
A107010001

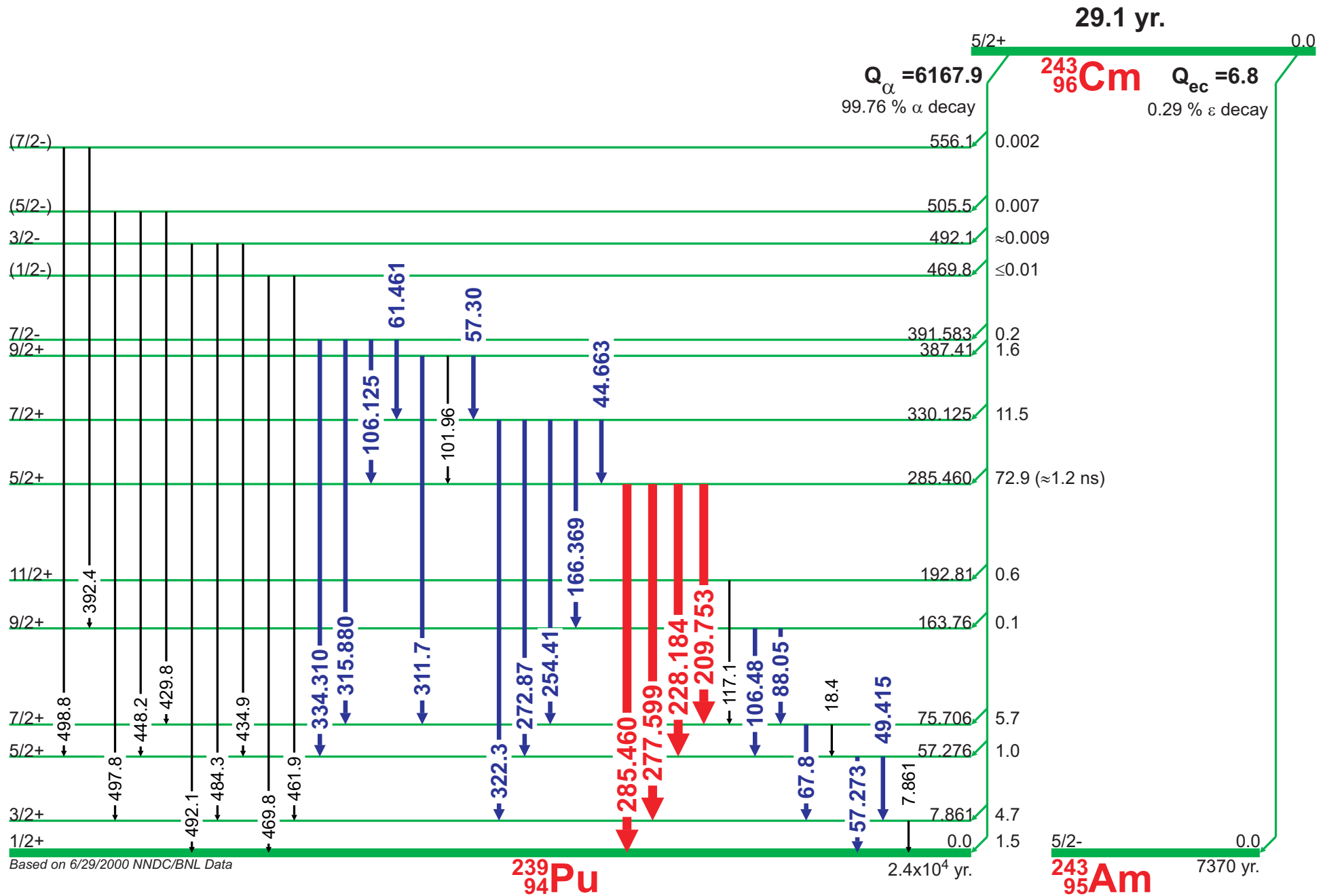
Source provided by ORNL/TEP



## <sup>243</sup>Cm Decay Chain



## <sup>243</sup>Cm (29.1 yr.) Decay Scheme



**<sup>239</sup><sub>94</sub>Pu**

**<sup>243</sup><sub>95</sub>Am**



## GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide:  **$^{243}\text{Cm}$** 
 $E_\gamma$ ,  $\sigma E_\gamma$ ,  $I_\gamma$ ,  $\sigma I_\gamma$ , Levels- from ENSDF Database as of June 29, 2000

Half Life: 29.1(1) yr.

$E_\gamma$ (keV)	$\sigma E_\gamma$	$I_\gamma$	$\sigma I_\gamma$	Level	
7.861	0.002	0.013	0.001	7.861	$\alpha$
18.4				75.706	$\alpha$
44.663	0.005	0.13	0.02	330.125	$\alpha$
49.415	0.002	0.081	0.008	57.276	$\alpha$
57.273	0.004	0.095	$\approx$	57.276	$\alpha$
57.30		0.045	0.010	387.41	$\alpha$
61.461	0.002	0.014	0.001	391.583	$\alpha$
67.8		0.14	0.04	75.706	$\alpha$
88.05	0.02			163.76	$\alpha$
101.96	0.02	0.008	$\approx$	387.41	$\alpha$
106.125	0.002	0.31	0.03	391.583	$\alpha$
106.48	0.02	0.011		163.76	$\alpha$
117.1	0.1			192.81	$\alpha$
166.369	0.002	0.017	0.009	330.125	$\alpha$
209.753	0.002	3.29	0.10	285.460	$\alpha$
228.184	0.002	10.6	0.3	285.460	$\alpha$
254.41	0.08	0.11	0.01	330.125	$\alpha$
272.87	0.09	0.08	0.01	330.125	$\alpha$
277.599	0.002	14.0	0.4	285.460	$\alpha$
285.460	0.002	0.73	0.02	285.460	$\alpha$

$E_\gamma$ (keV)	$\sigma E_\gamma$	$I_\gamma$	$\sigma I_\gamma$	Level	
311.7	0.2	0.017	0.002	387.41	$\alpha$
315.880	0.003	0.018	0.002	391.583	$\alpha$
322.3	0.2	0.007	0.001	330.125	$\alpha$
334.310	0.003	0.024	0.002	391.583	$\alpha$
392.4	0.5			556.1	$\alpha$
429.8	0.2			505.5	$\alpha$
434.9	0.3			492.1	$\alpha$
448.2	0.2			505.5	$\alpha$
461.9	0.4			469.8	$\alpha$
469.8	0.4			469.8	$\alpha$
484.3	0.3			492.1	$\alpha$
492.1	0.3			492.1	$\alpha$
497.8	0.2			505.5	$\alpha$
498.8	0.5			556.1	$\alpha$
640	$\approx$				$\alpha$
680	$\approx$				$\alpha$
720	$\approx$				$\alpha$
740	$\approx$				$\alpha$
760	$\approx$				$\alpha$

① These  $I_\gamma$  are per 100 Decays of  $^{243}\text{Cm}$ .

② For total uncertainty add systematic component of 0.03% in quadrature, based on the normalization factor 0.997 6(3)

