

**$(d,p\gamma)^{233}\text{Th}$**

**Spin cutoff  $\sigma$**

**8**  
**7**  
**6**  
**5**  
**4**  
**3**  
**2**  
**1**

- Spin-cutoff lower point  $\sigma_1$**   
**■ Spin-cutoff higher point  $\sigma_2$**

**0 1 2 3 4 5 6 7 8**

**Excitation energy E (MeV)**

