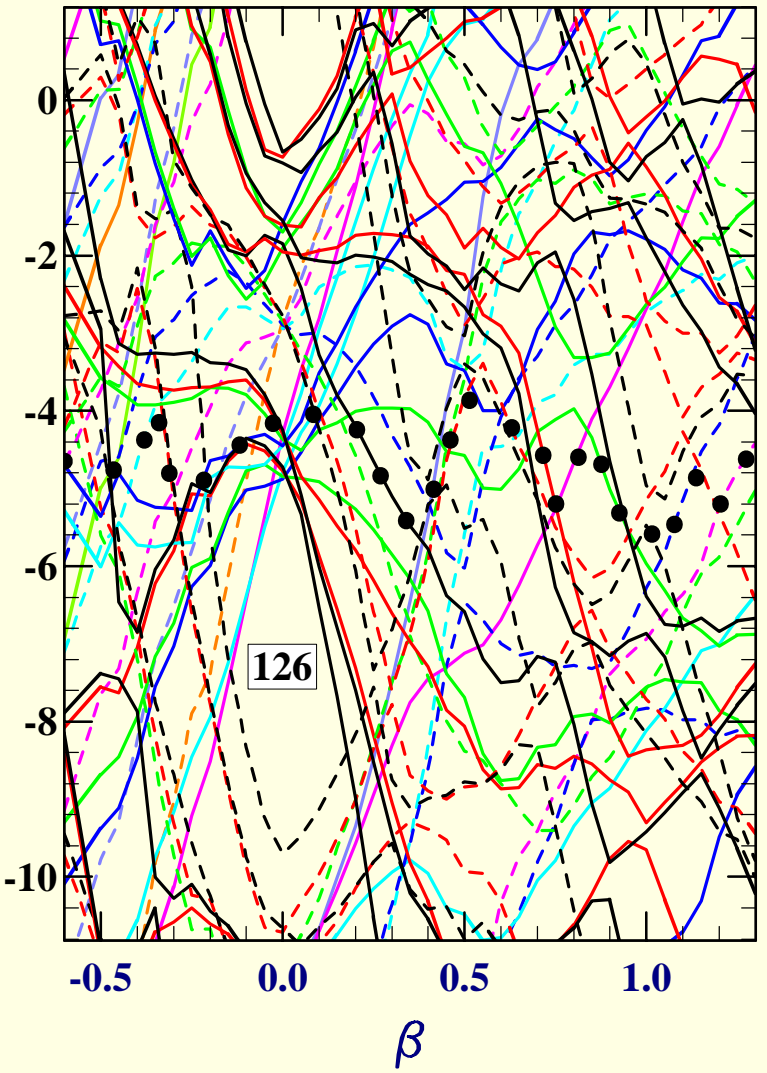
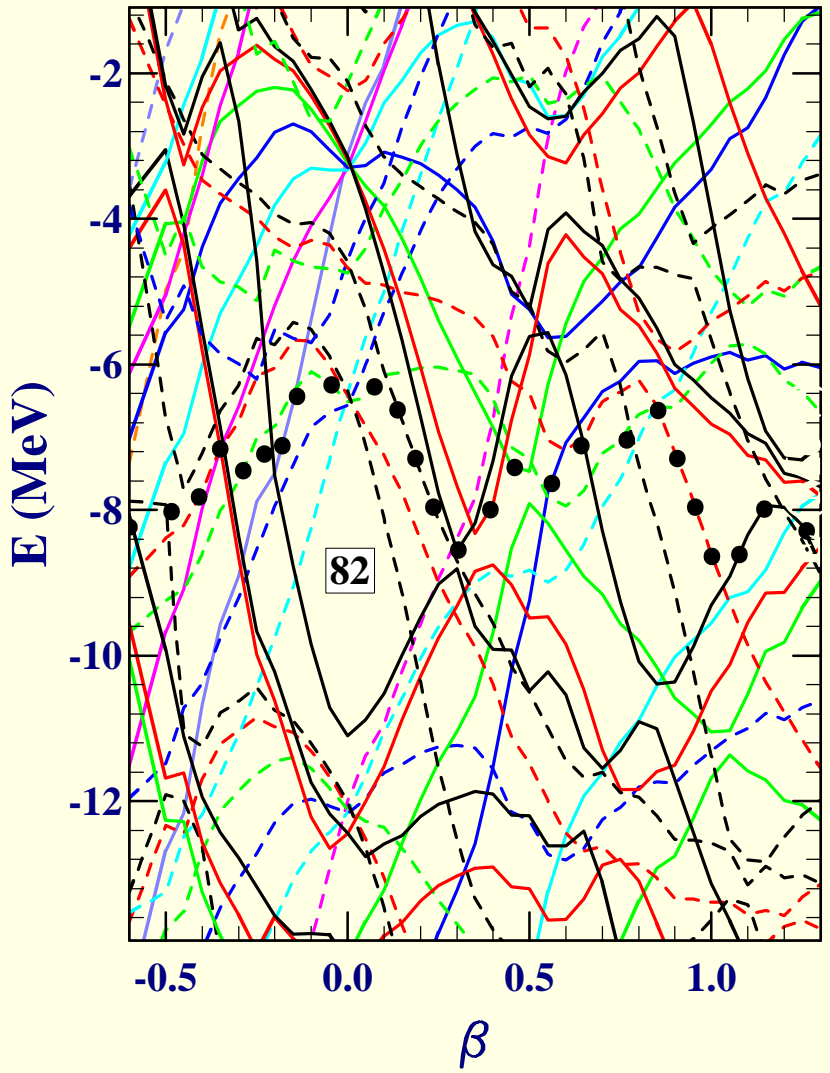




$^{231}_{88}\text{Ra}_{143}$

**Protons**

**Neutrons**



- |   |          |       |          |
|---|----------|-------|----------|
| — | $1/2^+$  | - - - | $1/2^-$  |
| — | $3/2^+$  | - - - | $3/2^-$  |
| — | $5/2^+$  | - - - | $5/2^-$  |
| — | $7/2^+$  | - - - | $7/2^-$  |
| — | $9/2^+$  | - - - | $9/2^-$  |
| — | $11/2^+$ | - - - | $11/2^-$ |
| — | $13/2^+$ | - - - | $13/2^-$ |
| — | $15/2^+$ | - - - | $15/2^-$ |
| — | $17/2^+$ | - - - | $17/2^-$ |
| ● | Fermi    |       |          |