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Mirror symmetry for nuclei near or beyond the proton drip line

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<p>The notion of mirror symmetry is well-established for nuclei on or near the valley of stability, and this has its roots in the (largely) charge independent nature of the nuclear force. We have applied this assumption to nuclei near or beyond the drip lines, in particular, the mass-15 system for 15F and 15C. Using information on the bound states in 15C we predicted states in 15F in 2006 which were subsequently found in 2009. We have extended our searches to other mirror pairs of exotic nuclei: in particular mass-17. In the case of mass-17 nuclei, we obtain interactions by considering the states in 17C, from which we may obtain information on other exotic mass-17 nuclei.

Level (Hons, MSc,
   PhD, other)?

Other

Consider for a student
   award (Yes / No)?

No

Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

Yes

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