

RIBF ULIC Symposium/mini-WS Report

* English only

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Title	[RIBF-ULIC-mini-013] Recent progress on tetrahedral shape in atomic nuclei		
Date	2011/12/22		
Place	RIBF Bldg. 2F, Conference Room, RIKEN Nishina Center		
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Summary of discussions and its (expected) results:

We focused on the experimental signatures of tetrahedral shape, which violates the parity and axial symmetries simultaneously. Although this exotic shape has been not yet observed, it may appear around 110Zr having double magic numbers, $Z = 40$, and $N = 70$.

We arrived at two conclusions in this mini-WS;

- 1) The isomeric state in 108Zr discovered at RIBF is a candidate of tetrahedral shape.
- 2) The rotational spectrum of tetrahedral shape has characteristic features (small moment of inertia, pattern of spin and parity, etc). This allows us to pin-down the exotic shape by performing further experiment at RIBF with EURICA spectrometer.

We also discussed future collaborations for tetrahedral-shape hunting.

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