

# RIBF ULIC Symposium/mini-WS Report

\* English only

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Title	[RIBF-ULIC-mini-WS:004] Toward the understanding of the IVSMR from the experimental and theoretical point of view		
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Place	Room 203 in RIBF building, RIKEN, Wako, Saitama, Japan		
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	[Breakdown]		
	SAGAWA, Hiroyuki	~15,580	
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## Summary of discussions and its (expected) results:

The isovector spin monopole resonance (IVSMR) is an important topic of interest in the study of the collective excitation of nuclei. The ( $t, {}^3\text{He}$ ) cross section distributions obtained in the RIBF facility provide a crucial evidence for the IVSMR of the beta+ type. For the comparison between the experimental and theoretical results, it is necessary to deduce the cross section distribution under the theoretical framework, where we need to combine the nuclear-structure calculation with the nuclear-reaction calculation. We have already had sophisticated computer codes for each independently (a code by Prof. Sagawa for the nuclear structure, and the DWBA code "FOLD" for the nuclear reaction), but the method of combining them has not been established.

In this workshop, we firstly reviewed details of the FOLD calculations, and then discussed how we put into FOLD the theoretical nuclear-structure wave functions provided by Prof. Sagawa. Finally we have successfully established a method of deducing the theoretical cross section distribution about the ( $t, {}^3\text{He}$ ) reaction. We decided to hold another meeting on 6-9 September at Sichuan University (China), where we will perform the cross section calculation based on the method established in this workshop.

## Participants list (Name, Affiliation):

Hiroyuki Sagawa	(University of Aizu)
Hideyuki Sakai	(RIKEN Nishina Center)
Kentaro Yako	(University of Tokyo)
Kenjiro Miki	(RCNP, Osaka University)

Please attach other documents as needed.