

# Nuclear Physics in HKU

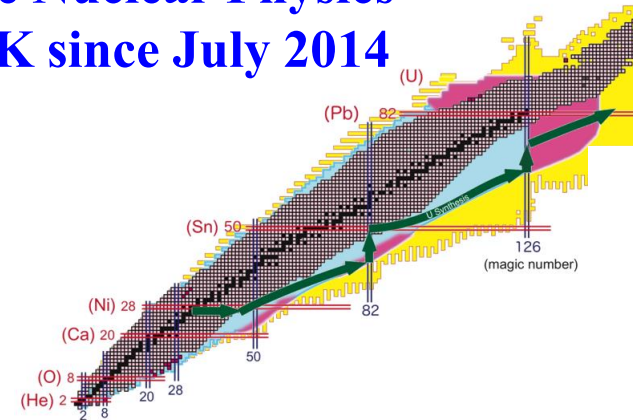
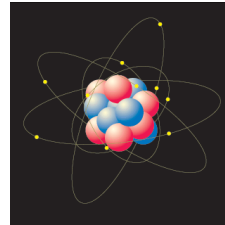


Jenny Lee

The University of Hong Kong



The only one Nuclear Physics Group in HK since July 2014

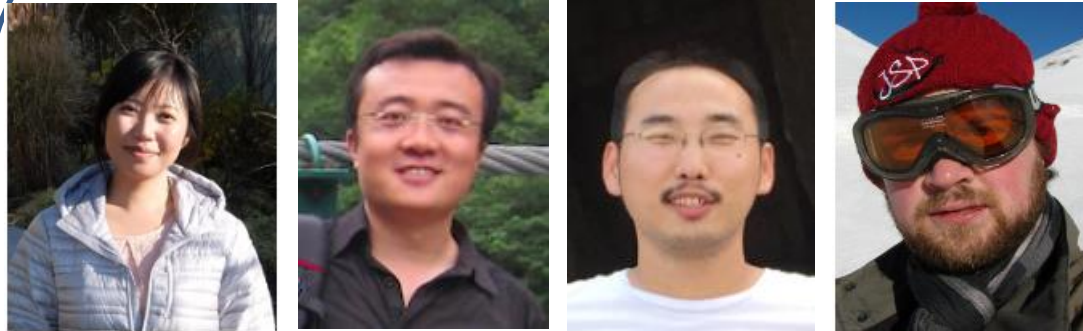


Report (2018-2019) for  
ANPhA 2019

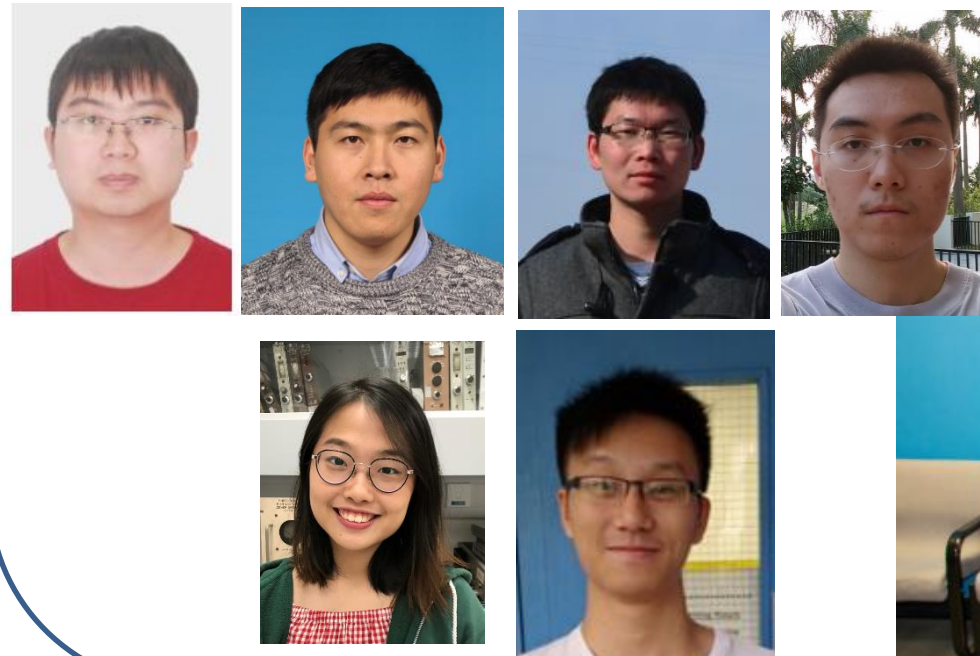
# HKU Nuclear Physics Group



## Current Members



**2 Postdocs, 4 PhD, 2 RA,  
5 UG**



# Research Activities (2018-2019) @ HKU

## Correlation Effect on a Nucleon (Direct Reactions)

- ( $p,d$ ) Transfer of  $^{34,46}\text{Ar}$  at 70 MeV/u (MSU, paper in prep.)
- Knockout of  $^{14}\text{O}$  at 200 MeV/u (RIKEN, data in analysis)

## Two-nucleon Correlations (Direct Reactions)

- Exclusive  $np$ -knockout of  $^{12}\text{C}$  at 200 MeV/u (RIKEN, paper in prep.)
- $^6\text{He}(p,p\alpha)$  at RIPS (RIKEN, paper in prep.)

## Alpha-cluster Correlations (Direct Reactions)

- ( $p,p\alpha$ ) of neutron-rich Be (RIKEN, data in analysis)

## Nuclear Structure (in-beam gamma spectroscopy)

- $^{53}\text{Ca}$  (RIKEN, paper submitted)
- $^{56,58}\text{Ca}$  (RIKEN, paper in prep.)
- $^{69,71,73}\text{Co}$  (RIKEN, paper submitted soon)
- $^{97}\text{Kr}$  and  $^{99}\text{Kr}$  (RIKEN, paper in prep.)
- $^{100}\text{Sn}$  (RIKEN, just performed in May 2019)

## Nuclear Structure ( $\beta$ -decay spectroscopy)

- $^{173,174}\text{Er}$  (RIKEN, paper submitted soon)
- $^{134}\text{Sb}$ - $^{148}\text{Xe}$  (RIKEN, paper in prep.)
- $^{26}\text{P}$  (IMP, paper in prep.)

# JINA-CEE International Workshop on “Beta-decay and Charge-exchange Reactions for Nuclear-Astrophysics”



**The University of Hong Kong**  
**20-22 September 2019**

*Organizing Committee:*

Chairs: Jenny Lee (HKU)

Organizers: Shunji Nishimura (RIKEN),

Hendrik Schatz (MSU),

Yang Sun (SJTU),

Remco Zegers (MSU)