

# A Systematic Description of the Wobbling Motion in Odd-Mass Nuclei Within a Semi-Classical Formalism

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## 1 Aim and Motivation

## 2 Introduction

- Nuclear Shapes
- Nuclear Triaxiality
- Wobbling Motion

# Aim

## Research Objectives

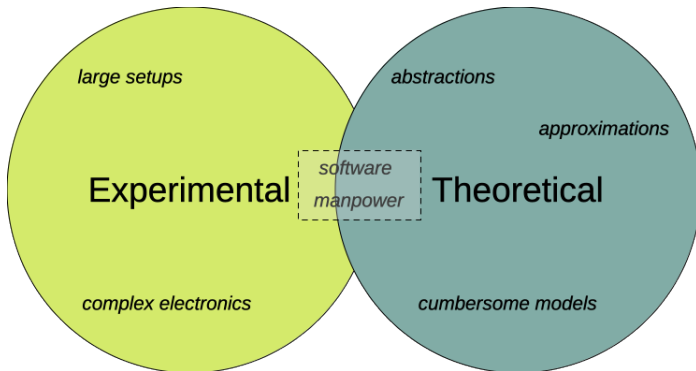
- Extend the current interpretation of the nuclear triaxiality
- Provide new formalisms for the phenomena related to *nuclear deformation*.
- *Exclusive to the thesis*: provide a detailed theoretical background and context towards a better understanding of the underlying concepts for the reader.

## Objective exclusive to the thesis

- Provide a detailed theoretical background and context towards a better understanding of the underlying concepts for the reader.
- A completely open-source project.

# Motivation

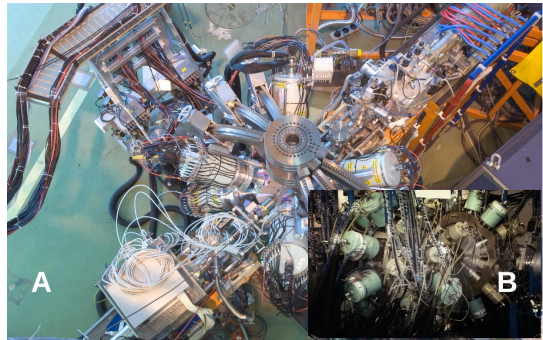
- **Nuclear Triaxiality** has become a *hot topic* within the scientific community.
- Identifying nuclei with triaxial deformations represents a real **experimental** and **theoretical** challenge



# Triaxiality - Nuclear facilities



**Figure:** Gammasphere detector, ANL-ATLAS USA. *Source: aps.org*



**Figure:** a) IDS detector, CERN. *Source: isolde.web.cern.ch* b) JUROGAM II, Finland. *Source: twitter.com*

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Thank you for your attention ♥