# Case 3: CACTUS + SiRi at the Oslo cyclotron laboratory

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## DESCRIPTION OF THE ASSIGNMENT

At the Oslo cyclotron laboratory (OCL) experiments are carried out to study the nuclear structure of isotopes at excitation energies up to the neutron binding energy. This is done by bombarding a thin target foil, typically 0.5 âĂŞ 4 mg/cm2 thick, with light ion beam accelerated by the cyclotron. The cyclotron can accelerate protons, deuterons, 3He and 4He beams. The âĹĘE-E-detector array SiRi is placed inside a vacuum chamber. On the outside NaI-detectors are placed at 25 cm distance from the target. The scintillator detectors are collimated with lead collimators. The analysis method (mostly) applied to the data, the Oslo method, requires particle-gamma coincidences.
Give a general overview of the CACTUS+SiRi detector setup at OCL. Describe the detectors of the setup and their characteristics. What is done to the signals from the detectors in order to have events that we can analyze to extract the information we are interested in?

## GENERAL OVERVIEW OF THE CACTUS + SIRI DETECTOR SETUP AT OCL

## HANDELING OF SIGNALS AND EVENTS