

What can we learn from transfer, and how is best to do it? The good, the bad and the ugly

Tuesday 9 December 2025 10:00 (35 minutes)

This talk will explore how single-nucleon transfer reactions are carried out with radioactive beams in inverse kinematics, focusing primarily on experimental aspects. The scientific motivation and theoretical tools used to interpret these reactions will be briefly outlined, but the main emphasis is on the techniques employed and the observables that can be extracted. Particular attention will be given to reaction characteristics that influence experimental design. Several experimental strategies will be discussed, including configurations based on silicon-stripped detectors, time-projection chambers (TPCs), and solenoidal spectrometers. For each approach, the reasoning behind the setup will be examined in terms of feasibility, resolution, and physics reach. Recent transfer-reaction results with light nuclei will be presented to illustrate the capabilities of these methods, focusing on their strong points, fundamental limitations, and where subtle experimental details can complicate the interpretation and analysis of the data.

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