

## Abstract

We propose to investigate possible medium modifications of neutron electromagnetic form factors by measuring recoil polarizations for the semi-inclusive quasifree  ${}^4\text{He}(\vec{e}, e'\vec{n})$  reaction at  $Q^2 = 1.0 \text{ (GeV/c)}^2$ .

### Requirements

Beam energy	: 1.645 GeV
Beam polarization	: $\sim 80\%$
Beam current	: $\leq 20 \mu\text{A}$
Target	: 15 cm cryogenic helium
Luminosity	: $4 \times 10^{37} \text{ cm}^{-2} \text{ s}^{-1}$
Detectors	: Hall C HMS + neutron polarimeter
Beam time	: 336 hours