

# Responsibilities for DarkLight at ARIEL

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# Responsibilities

## Magnetic spectrometers

- design and construction - MIT
- ray tracing and simulation
- field mapping at TRIUMF

## Scattering chamber and target system

- design and construction - MIT
- vacuum and control system - MIT

## GEM detectors

- design and construction - HU
- readout electronics - HU

## Data acquisition - SBU

## Scintillating strip detector

- design and construction - SMU, UW
- readout - SMU, UW

## Integration with ARIEL - TRIUMF

- vacuum system
- beam diagnostics, clock, and control

## Monte Carlo simulation

- theoretical calculations

## Testing at ARIEL

- background and rate studies
- detector calibration