MICE Muon Beamline

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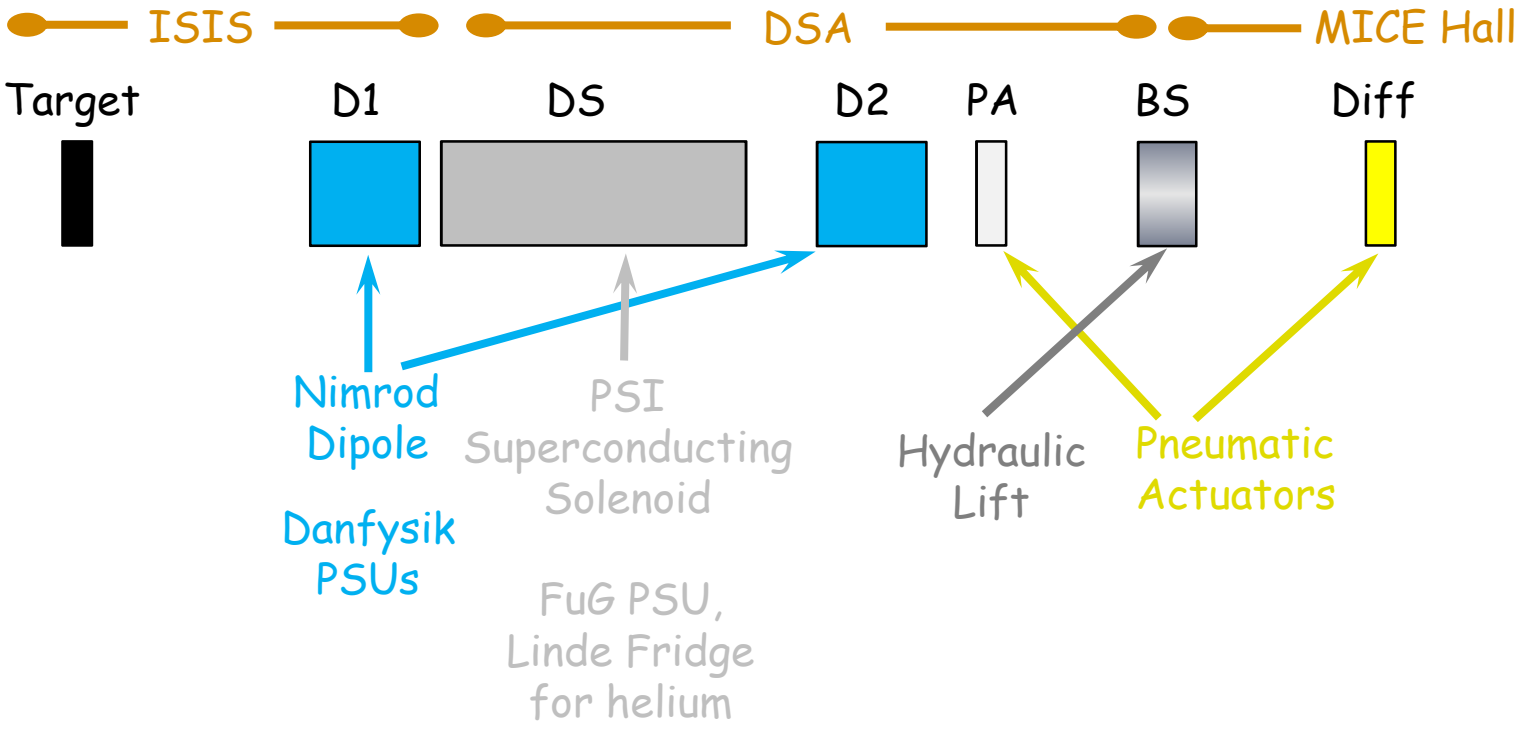
Muon Beamline

The MICE Muon Beamline provides the MICE Cooling Channel with a well-defined "beam" of muons – actually pulses at MS/64 with ~50 usable muons in each.

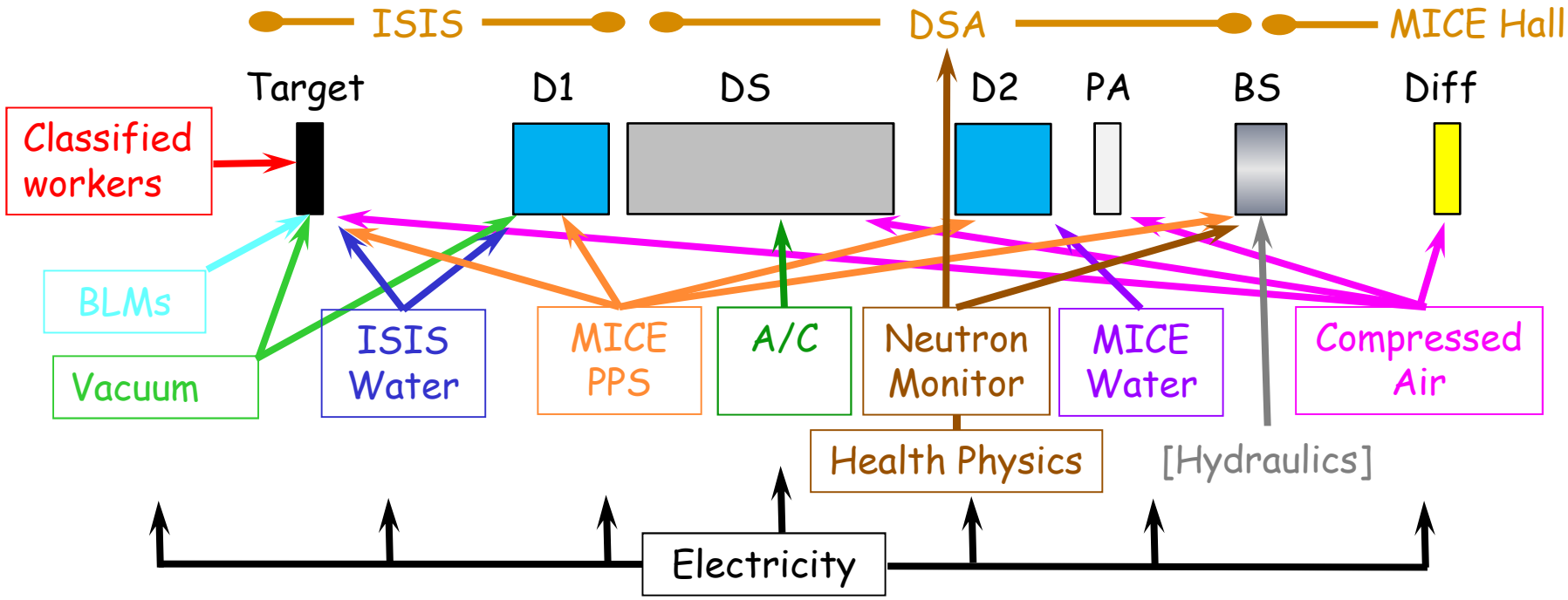
The muon momentum is selected by the bending magnet currents, and the emittance is tuned by a variable thickness diffuser. We can provide either positive or negative muons, by inverting the polarity of the magnets.

Simplified Sketch



(The colours are arbitrary and I've omitted the quads for clarity)

… and with services



These are the services we consume from outside the subproject.
(The colours are arbitrary and I've omitted the quads for clarity)