

# PROSPECT Neutrino Detector

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## Detector Parameters

Active liquid scintillator mass: ~4 tons

Total weight: 38 tons

Dimensions: 114×104×116 in<sup>3</sup>

Base Area: 102 ft<sup>2</sup>

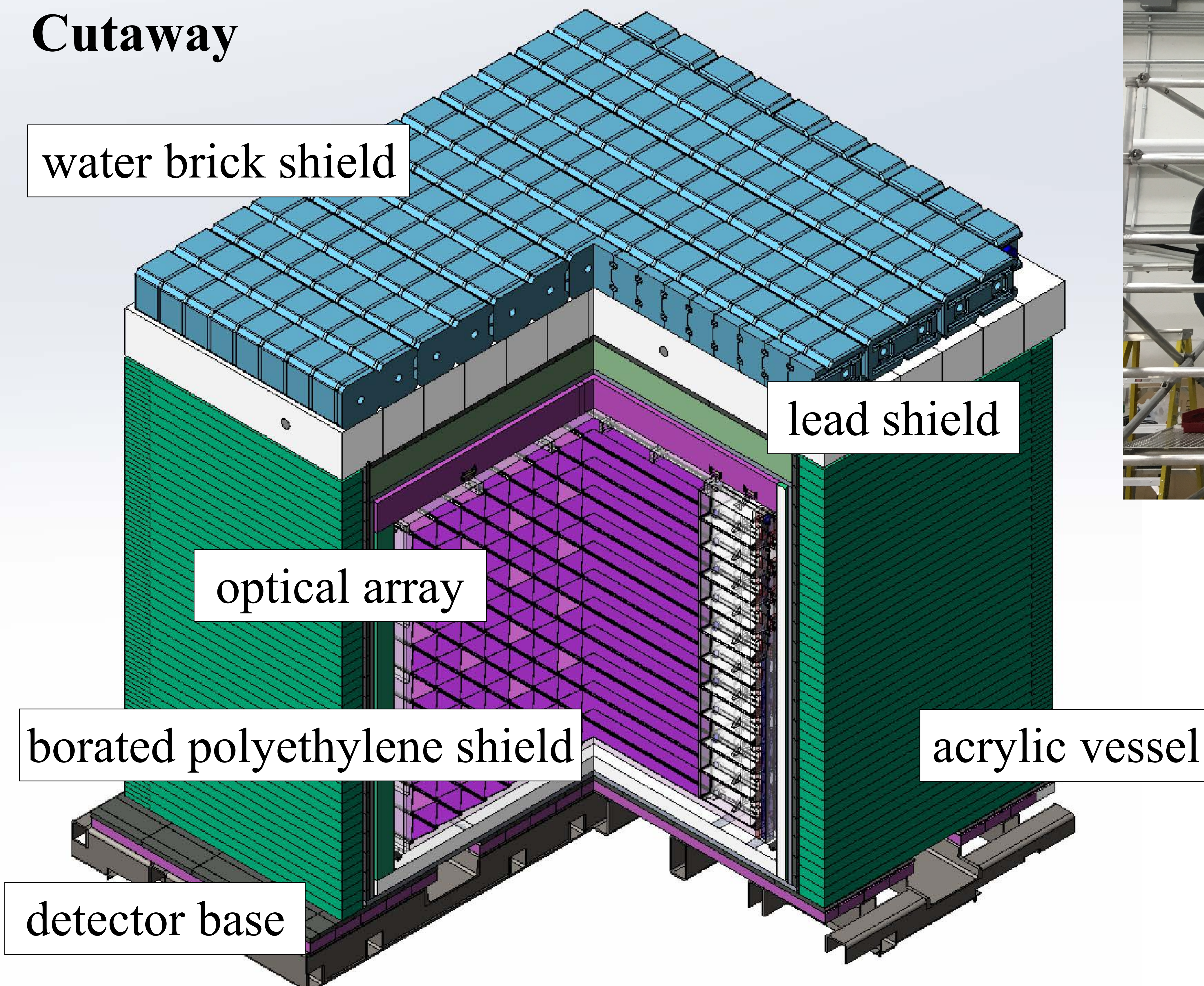
Movable via air casters

## Construction at Yale Wright Laboratory



aluminum containment tank

## Cutaway



water brick shield

lead shield

optical array

borated polyethylene shield

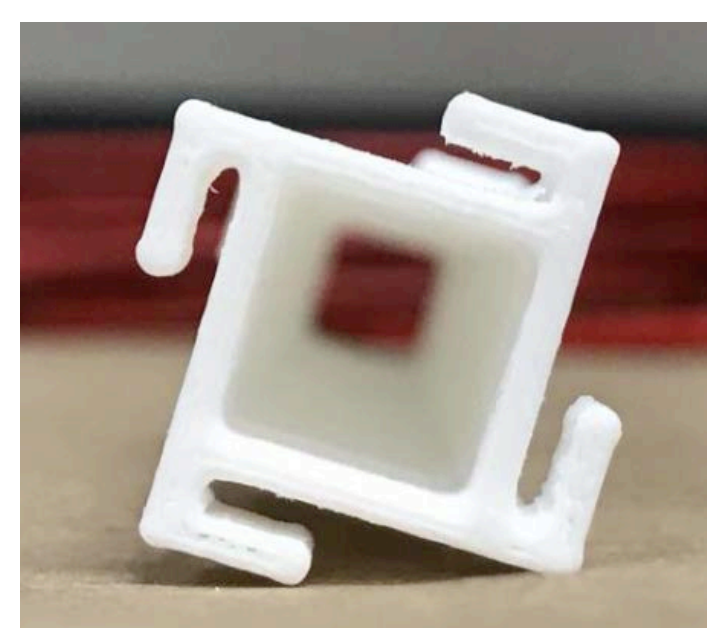
acrylic vessel

detector base

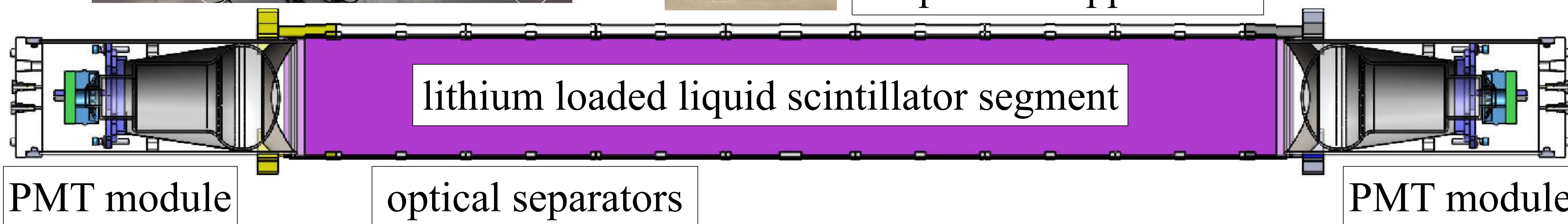
## Exterior View at Reactor Site



<sup>6</sup>Li-scintillator segments



3D printed support rods



lithium loaded liquid scintillator segment

PMT module

optical separators

PMT module

## Collaboration



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