

mini Time Cube

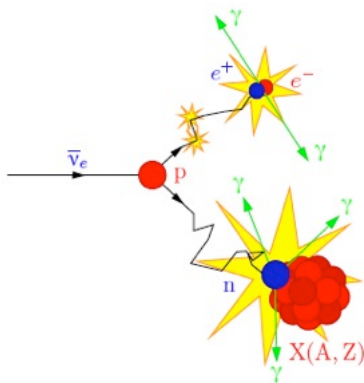
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Phys 476 - UH Manoa Department of Physics

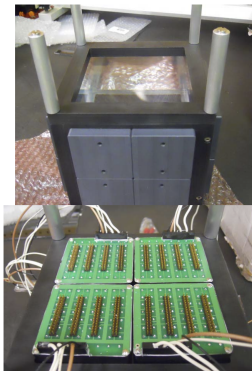
May 8, 2012

Reactor/Geo- Neutrino Detection

- inverse beta decay
- 1.8-15 MeV antineutrinos
- Boron doped scintillator for faster neutron capture
- neutrino directionality

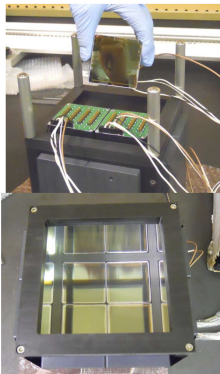


The Detector:



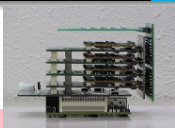
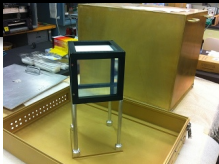
March 30, '11

mTC Commissioning

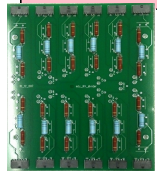
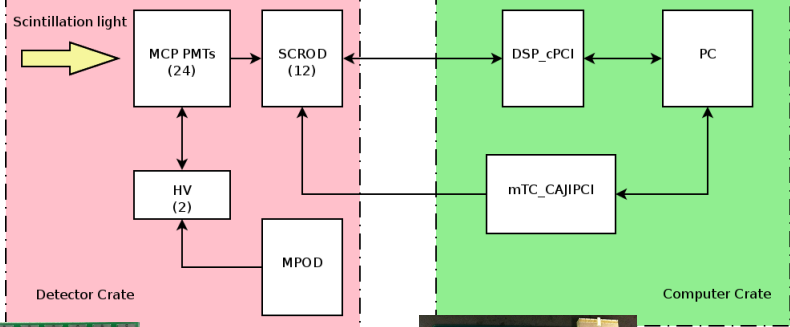


- small, portable neutrino detector (13 cm)
- Microchannel Plate (MCP) PMTs
- 8x8 channels/pmt
→ 1536 total channels
- high spatial and timing resolution
- KamLAND: 18m, 1879 PMTs

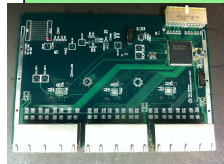
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DSP_cPCI



HV Divider



mTC_CAJIPCI