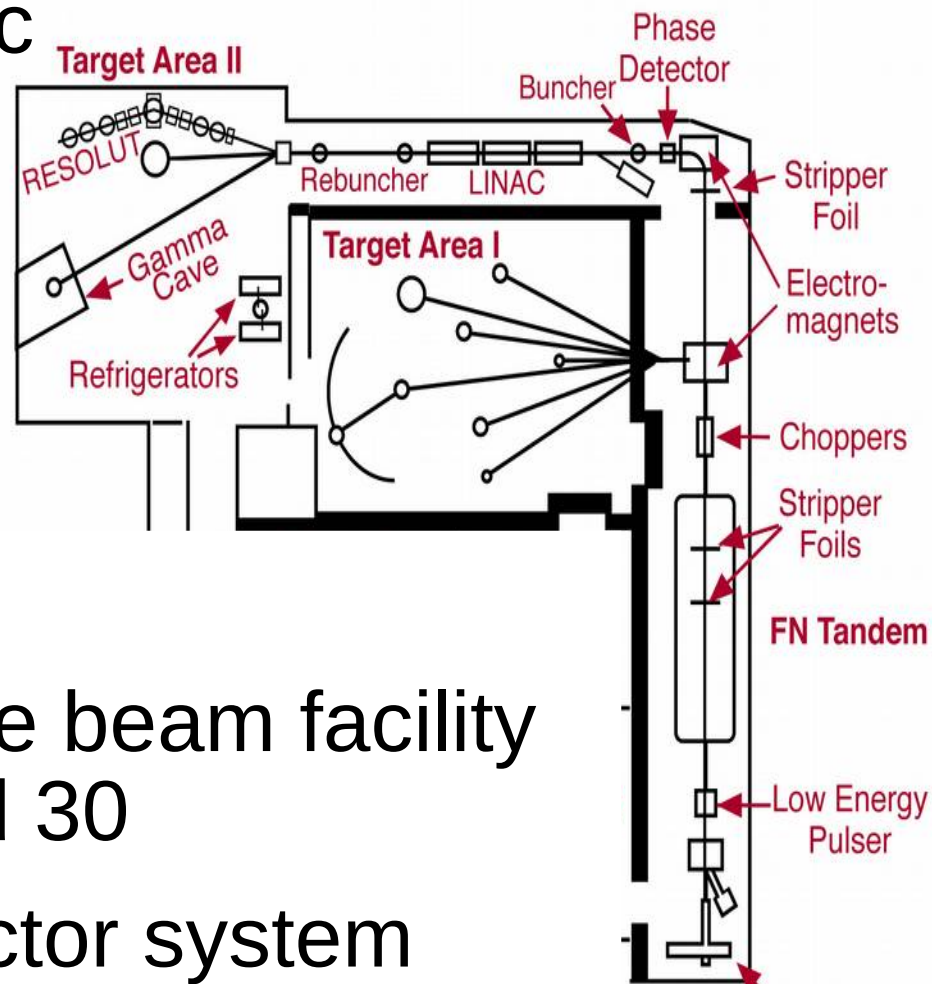




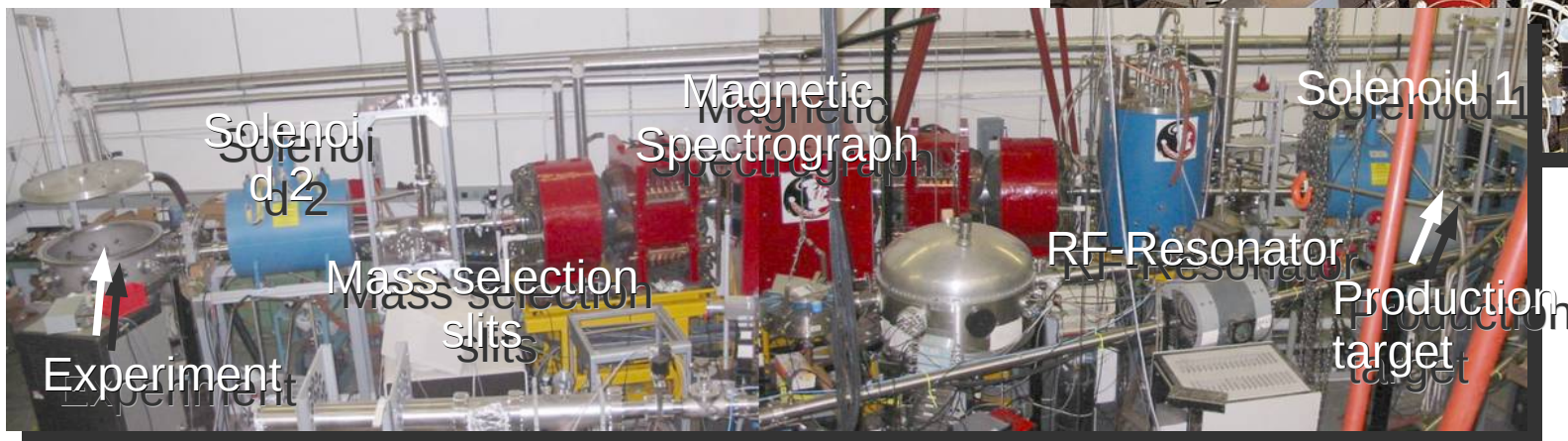
# FSU: Facility and Equipment

- 9 MV “FN” Tandem vdG,  
9 MV Superconducting Linac  
Beams: p – Calcium  
10 MeV/u up to mass 6  
5 MeV/u up to mass 40
- Compton-suppressed  
**HPGe array**,  
3 clover + ~10 conventional
- **RESOLUT** in-flight radioactive beam facility  
beams between mass 6 and 30
- **ANASEN** active-target detector system
- **ResoNeut** low-energy neutron detectors





# John D. Fox Accelerator Laboratory





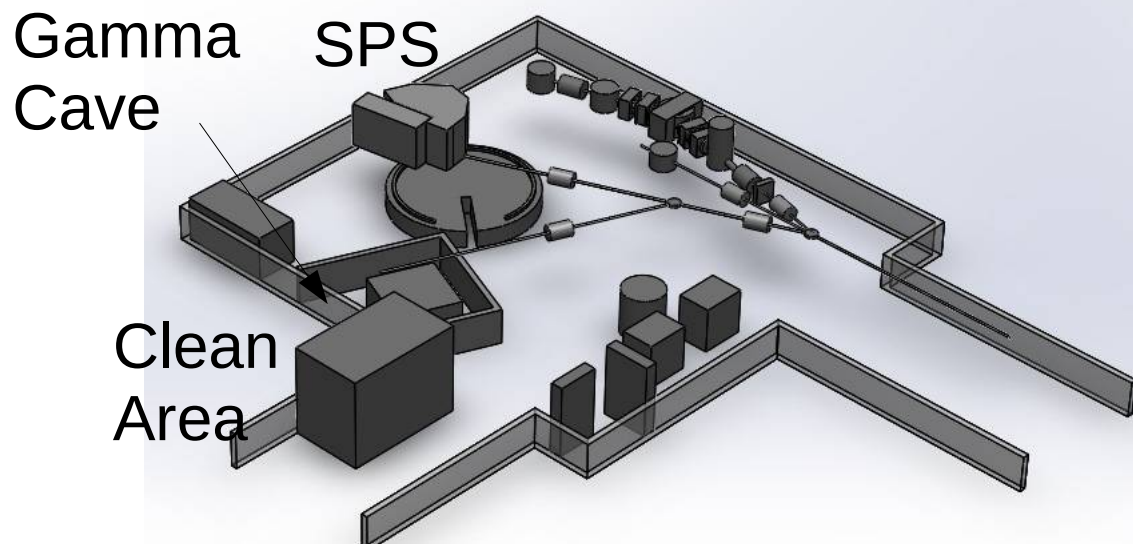
# FSU experimental LE Nuclear Physics: People

- NSF funded FSU-funded
- Faculty: S. L. Tabor, M. A. Riley, P. Cottle, I. Wiedenhoefer, NN  
Nuclear Structure of Exotic Nuclei,  $\gamma$ -spectroscopy, resonance and transfer reactions with radioactive beams,
- Staff Scientists  
Dave Caussyn (DAQ / computer / control)  
Lagy T. Baby (RIB facility)  
Vandana Tripathi (gamma-spectroscopy)
- Currently 14 Graduate Students / 4 undergraduate
- Technical Staff: 1+2 Accelerator-related
- Instrument Shop (free of charge) : 2 Machinist
- Electronics Shop (free of charge) : 2 Technicians



# FSU: Future Research Directions

- MRI-proposal (to be funded !) to LSU / FSU 2014-16 Installation of (Yale) **Split-pole spectrograph**: high resolution, large 10 msr acceptance
- Programs in Nuclear Astrophysics, Nuclear physics of unbound systems
- **Upgrade of Linac** in phases: 8 more resonators  
Potential: 9 MV Tandem + 14 MV Linac
- Improve reach of in-flight radioactive beams for nuclear astrophysics





# FSU: Connections to Programs Elsewhere

- Gamma-spectroscopy at SeGA / Gretina at the NSCL
- Gamma-spectroscopy with Gammasphere / Gretina at ATLAS / Caribu
- Program with **ANASEN** at ReA-X; Nuclear Astrophysics and Structure of Exotic Nuclei

