

# ***SUMMARY & ACTION ITEMS***

***I.Y. Lee***



***GRETINA Detector Working Group Meeting***

***ORNL, March 19 - 20***

# Action Items

- **Warm vs Cold FETs?**
  - **\*\*\*\*\* Major priority 1 item! \*\*\*\*\***
  - Can we find a warm FET which equals performance of present cold FET
  - Ship 36 seg prototype back and get some segments converted to use warm FETs for direct comparisons
  - Talk more with other people (Elec. WG, + LBL + ....)
  - **Augusto et al**
- **Can we reduce 4 types in triplet to 2?**
  - **\*\*\* priority 2 item \*\*\***
  - How does it effect effic?
  - Can one reg/irreg type fit all? How does this effect eff?/Cost
  - **David/John**
- **Quad geometry details to Daniel**
  - - **David**
- **Segment Length Optimization**
  - Study for 500, 1000, 3000 keV to maximize 1 or 2 hits/segment
  - **Martina**
- **Anisotropy of Hole Velocity**
  - Find some help eg. Frank A. knows someone. Paul Luke to follow up also.
- **Measurement of Anisotropy**
  - Measure efficiency as a function of segment from on-axis source
  - **Paul**

# ***Action Items (contd)***

- **Update Pulse Shape code (IY + Martina)**
- **Impurity Concentration as a Function of Radius and our specs (David + Martina + Paul Luke + Daniel)**
- **Testing Mechanical Tolerances (Jim and Daniel)**
  - **Mold or CMM?**
- **Calibrating Inner Surface Segments ( LBNL + Thomas)**
- **Hemisphere or 2 quarters? Or 2 hemis or 4 quarters? Attachments for support? Can we rule out Lotus? (Jim)**
- **Transverse mounted support structure is it! End of story.**
- **Moving GRETINA/GRETA between beamlines (RIA) and/or Labs (Jim)**
- **Inner radius final decision? (Dave + )**
- **Accommodate Cables and LN? (Jim)**
- **Installation of detector modules and retraction for moving? (Jim)**
- **Number of Chambers and how to support them (DGS + Jim)**
- **Data Acq system to help Eurisys (Mario + David)**

# ***TRIPLET vs QUAD:***

## ***Impact issues for discussion***

- 1. Warm vs Cold FET**
- 2. Tooling Costs**
- 3. R&D + Prototyping**
- 4. Production Cost**
- 5. Reliability**
- 6. Flexibility (aux dets & angular range)**
- 7. Efficiency**
- 8. Annealing**
- 9. Impact on Schedule**
- 10. # of Spares needed**
- 11. Support structure – grab points etc**