

# 2025-LDRD-07: First Quarter Update

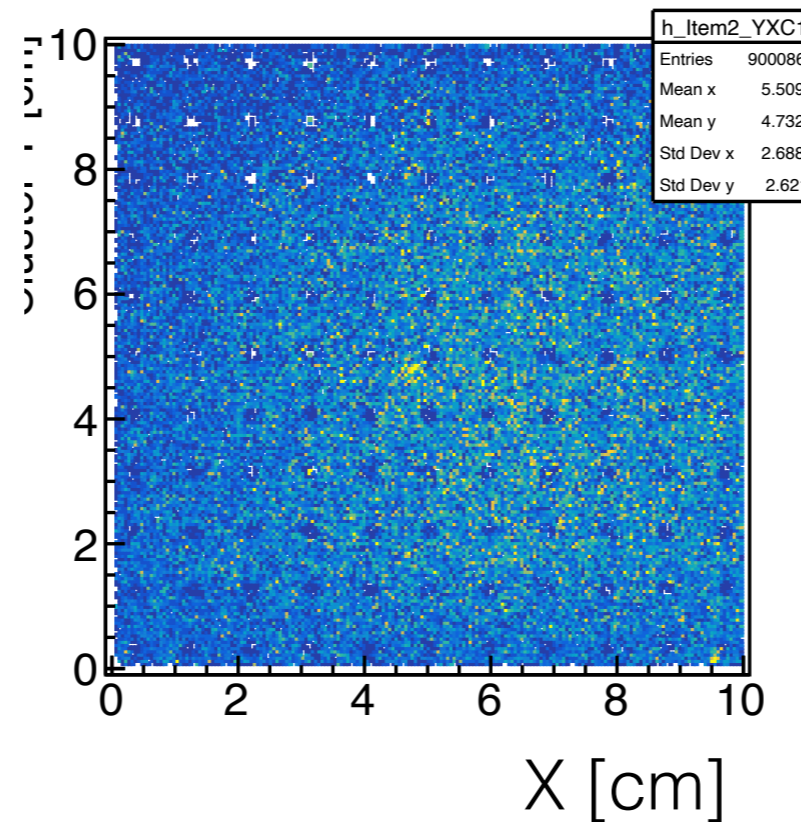
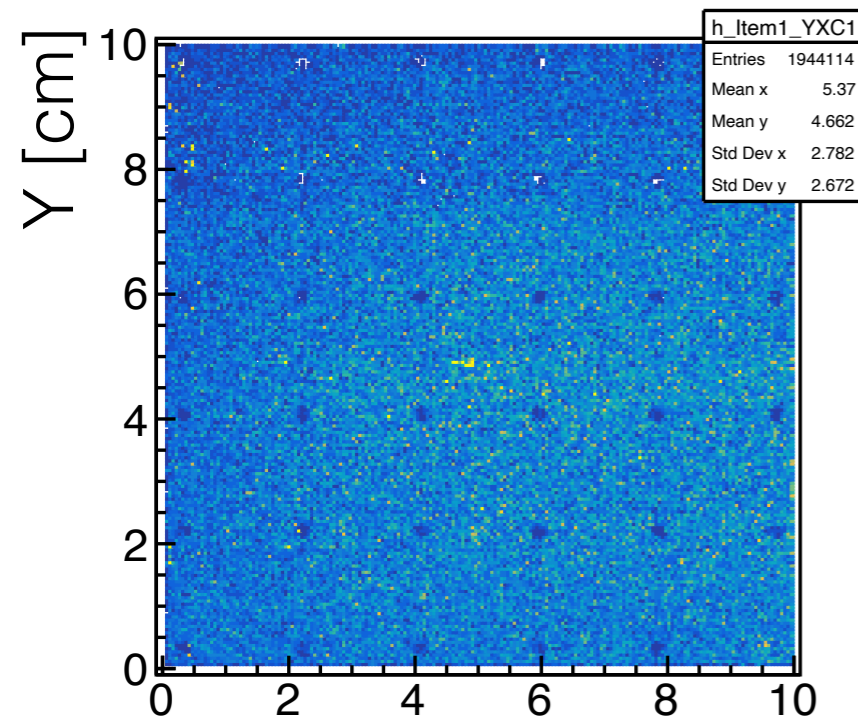
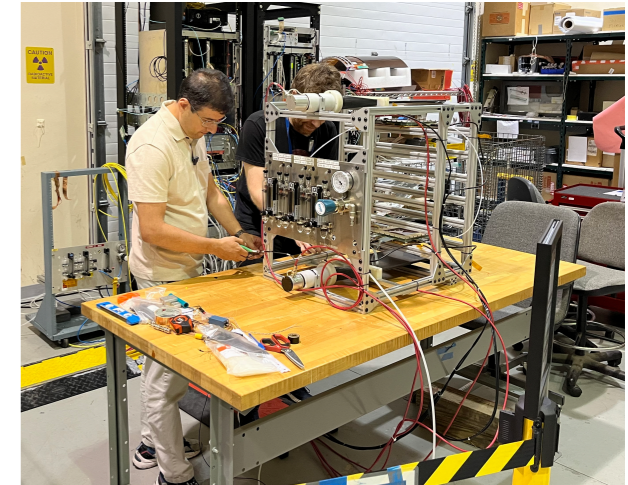
Florian Hauenstein (PI)  
Rafayel Paremuzyan (Co-PI)  
Kondo Gnanvo (Contributor)  
LDRD Meeting  
01/21/25

Advisers: Stepan Stepanyan (JLab),  
Maurizio Ungaro (JLab),  
Raffaella Devita (INFN)

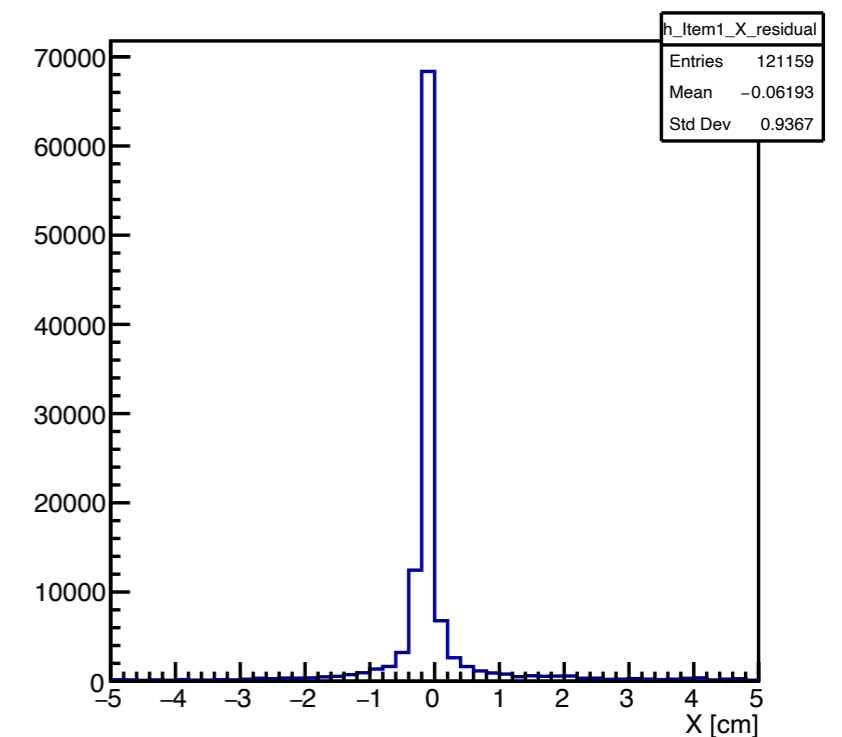


# Objectives - Status

1. Testing of small prototypes with cosmic in progress
  - Initial results obtained
  - More testing with different settings in progress

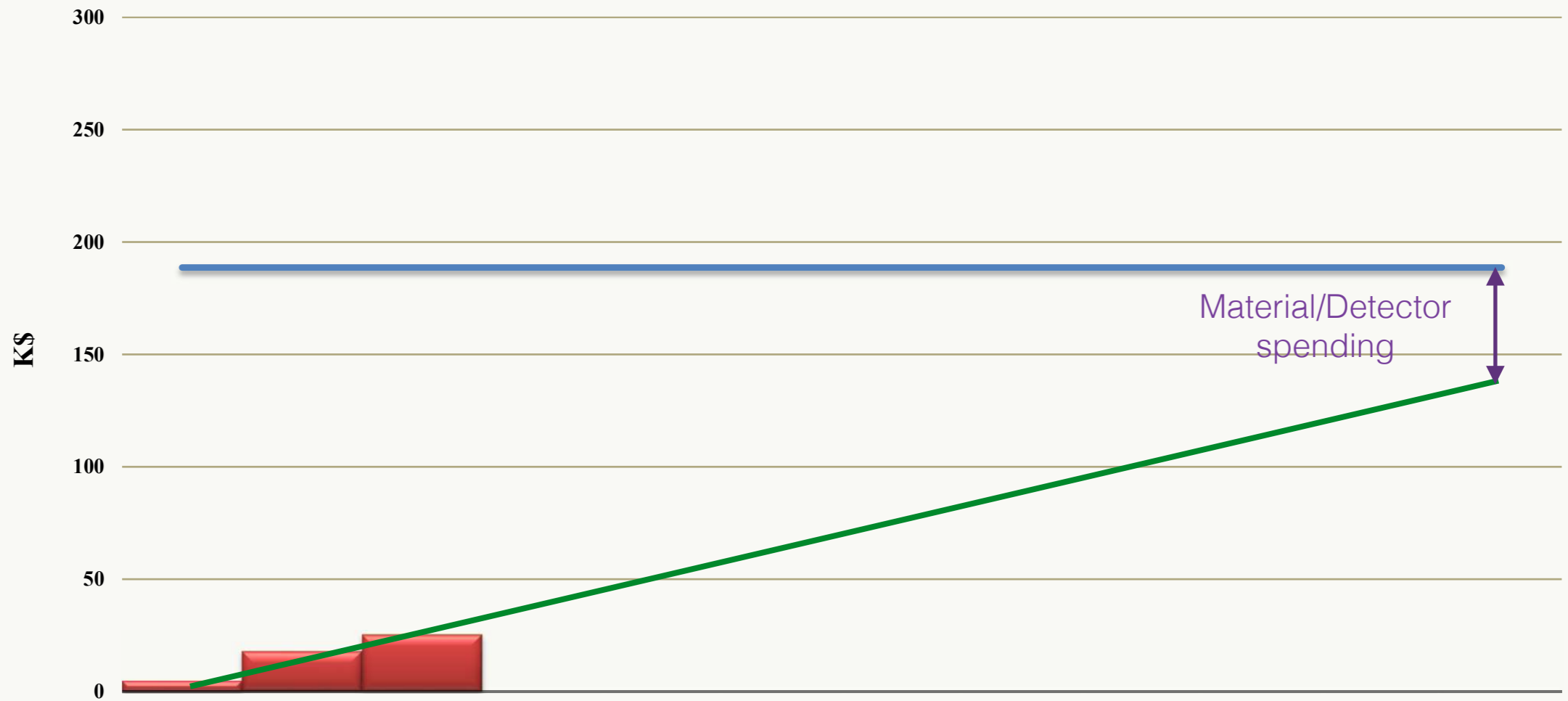


Track residual for Item 1 - X axis



2. Beam test preparations underway in Hall B
  - Originally beam tests planned for Jan/Feb -> Delayed due to beam time delay
3. Design of large prototype (30x30cm) started but final design needs to wait for beam tests —> possible 1-1.5 month delay to original schedule

# Budget Status - End of December



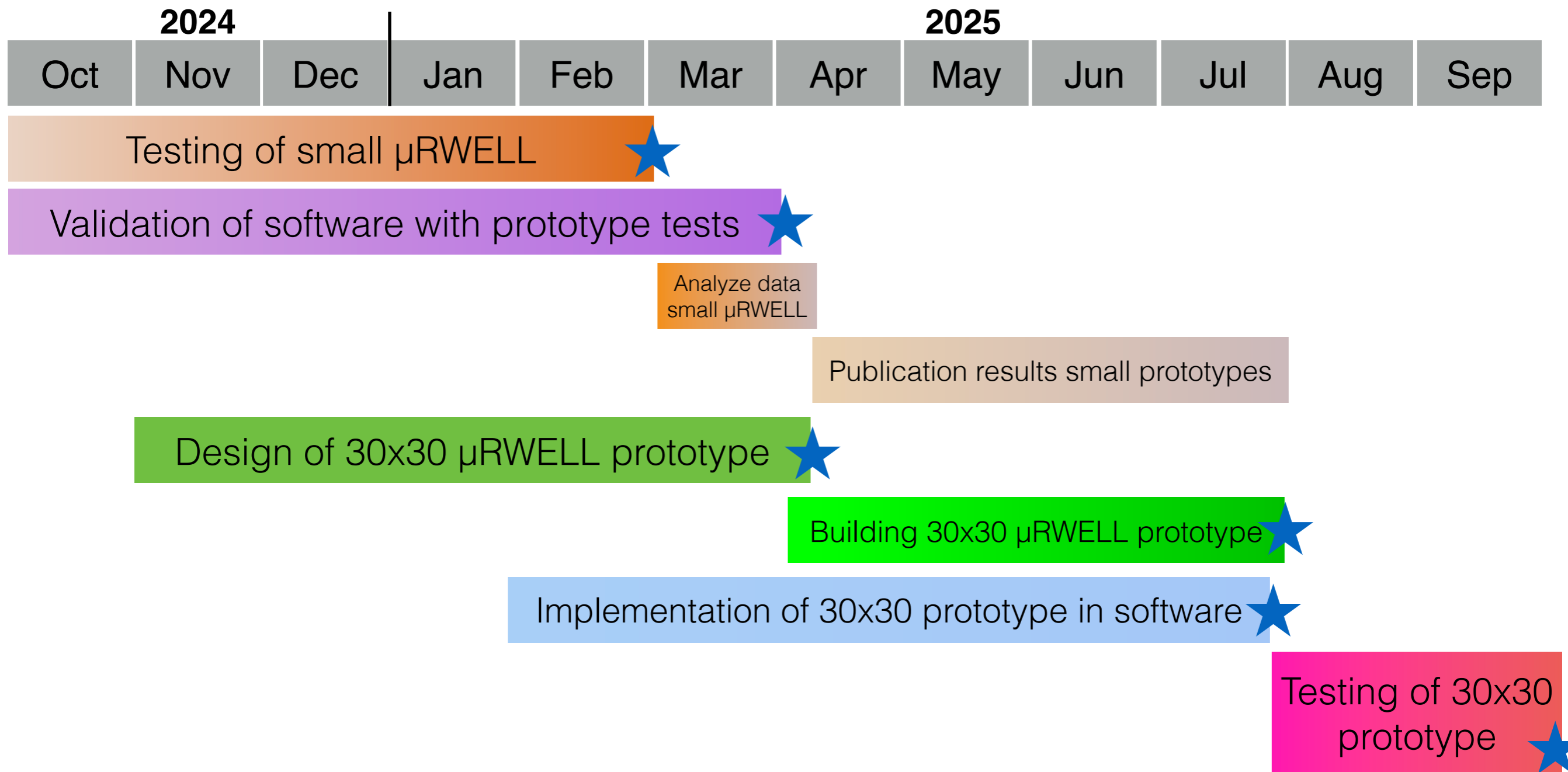
	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
<b>YTD Spending</b>	5	18	26	0	0	0	0	0	0	0	0	0
<b>Pending</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Open Obligations</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Expenses</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Labor</b>	5	18	25	0	0	0	0	0	0	0	0	0
<b>Funding</b>	189	189	189	189	189	189	189	189	189	189	189	189
<b>3-Mo Avg Projection</b>												

- Missing labour in October due to delayed LDRD start
- Labor on track
- \$40k spending for material/detector in next months

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# Backup Slides

# Second Year Objectives and Milestones★



## End of project deliverable:

- Efficiency and resolution dependence on particle rates, HV settings and gas mixture
- Validation of simulations and reconstruction software
- Optimized and tested high-rate capable  $\mu$ RWELL design for high-luminosity experiments

# Budget and Responsibilities

- Total 2<sup>nd</sup> year budget - \$188k
  - \$140k personnel

Name	Role	FY Effort (% FTE)	Responsibilities
<b>Florian Hauenstein</b>	PI	15	Oversee project as PI and work on design and test of prototypes
<b>Rafayel Paremuzyan</b>	Co-PI	10	Development of simulation and reconstruction together with Postdoc, support prototype tests
<b>Kondo Gnanvo</b>	Contributor	5	Design of prototypes, support testing of prototypes
<b>Sara Liyanaarachchi</b>	Postdoc	80	Development of software, test measurements of prototypes

- \$40k materials and supplies
  - large prototype ~ \$30k
  - test stand materials and transport ~ \$10k
- \$8k travel