

2025-LDRD-07: Second Quarter Update

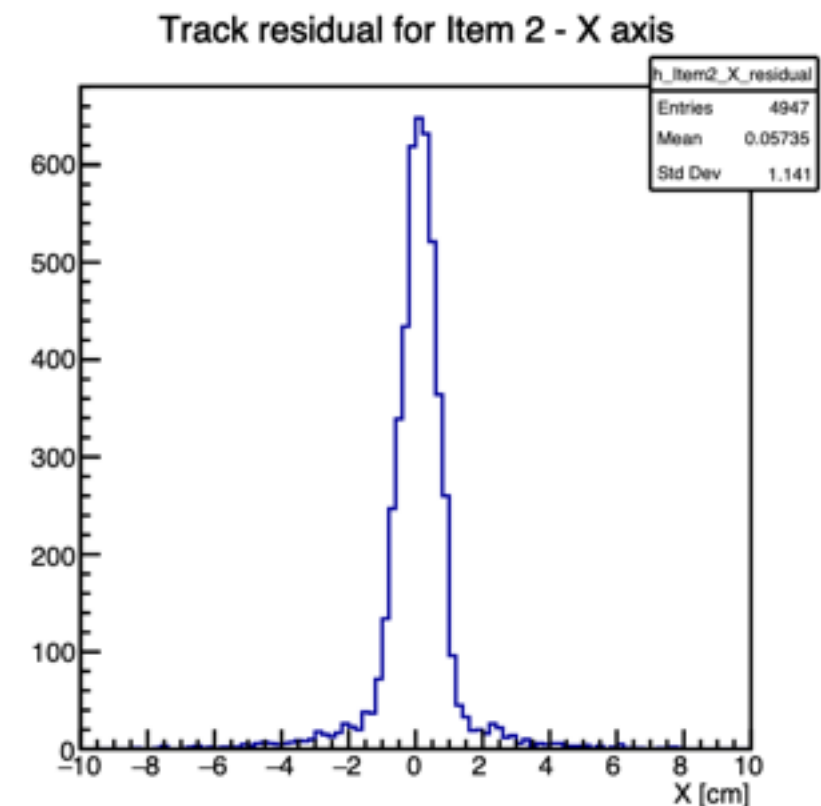
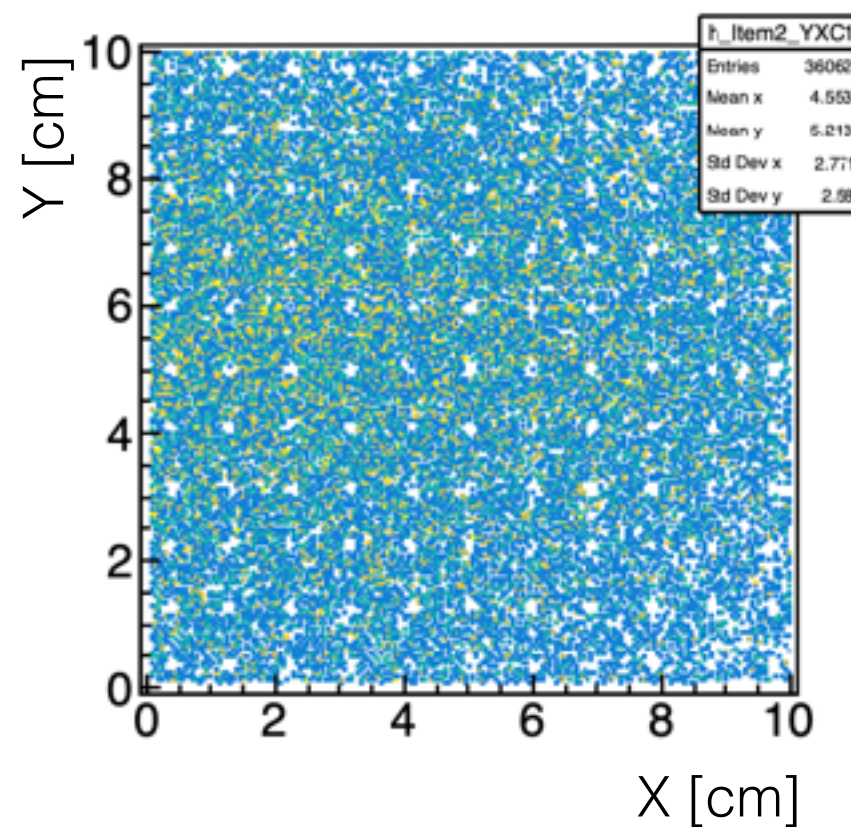
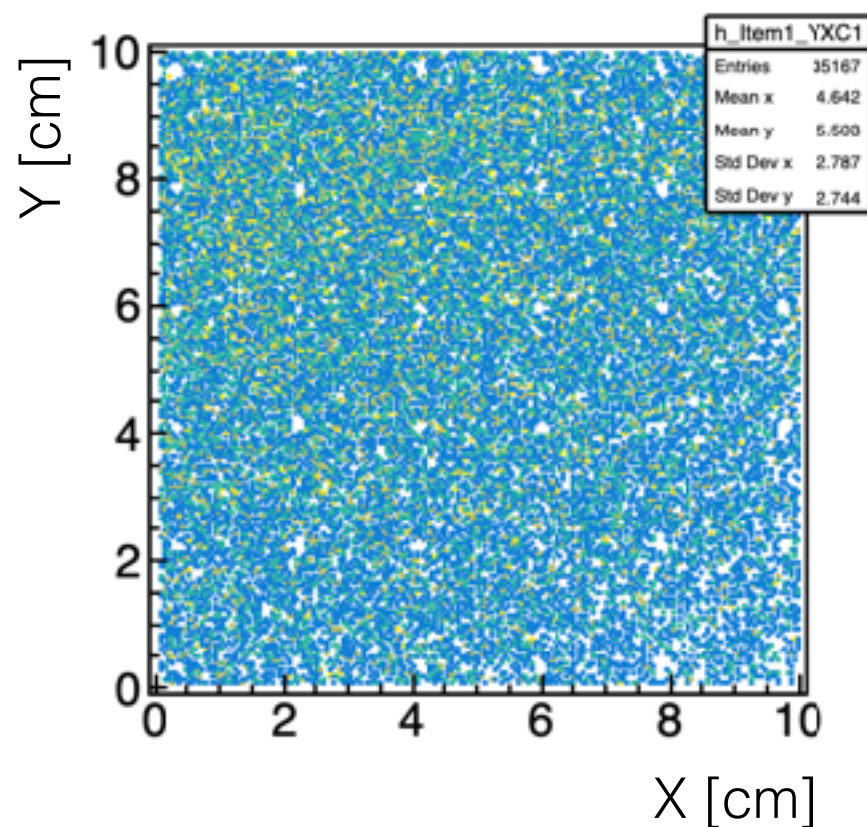
Florian Hauenstein (PI)
Rafayel Paremuzyan (Co-PI)
Kondo Gnanvo (Contributor)
LDRD Meeting
05/01/25

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



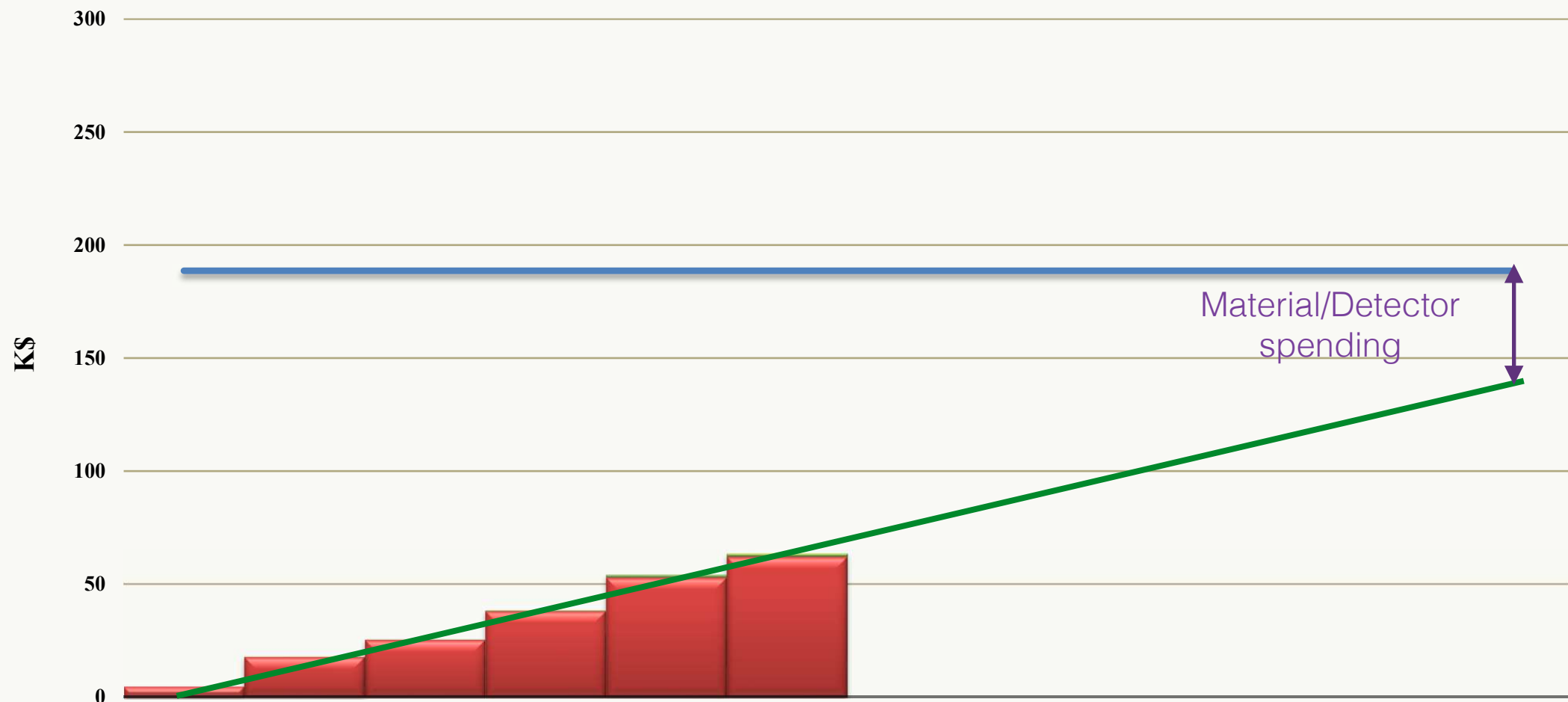
Objectives - Status

1. Testing of small prototypes underway behind CLAS12 in HallB
 - Initial results obtained
 - More testing with different settings in progress
 - Issues:
 - Particle rates not high enough to test push detector —> Plans in development to move to HallC in next weeks.
 - Testing delayed by 6 month compared to plans due to late beam start



2. Design of large prototype (30x30cm) started but final design needs to wait for beam tests —> currently 3 month delay to original schedule. Makes it harder to get larger prototype to the lab before September

Budget Status - End of March

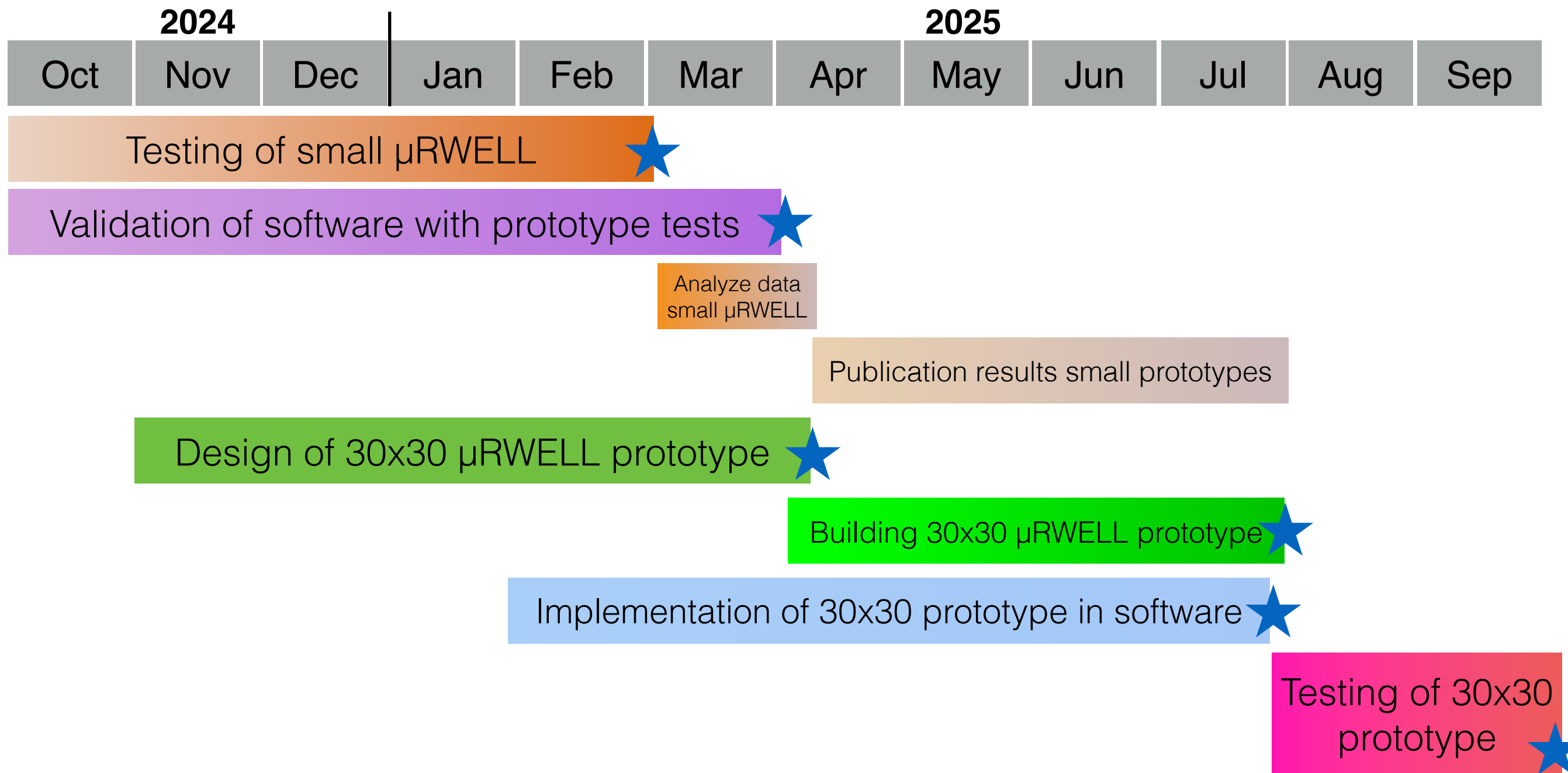


	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
YTD Spending	5	18	26	38	54	63	0	0	0	0	0	0
Pending	0	0	0	0	0	0	0	0	0	0	0	0
Open Obligations	0	0	0	0	0	0	0	0	0	0	0	0
Expenses	0	0	0	0	1	1	0	0	0	0	0	0
Labor	5	18	25	38	53	62	0	0	0	0	0	0
Funding	189	189	189	189	189	189	189	189	189	189	189	189
3-Mo Avg Projection												

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

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 μ RWELL design for high-luminosity experiments

Budget and Responsibilities

- Total 2nd year budget - \$188k
 - \$140k personnel

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

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