Fermilab U.S. DEPARTMENT OF ENERGY Office of Science

Shaft Equipment Accessibility Workshop Overview

Linda Valerio

MAGIS-100 Modular Connection Node Workshop

12 July 2022

MAGIS-100

Workshop introduction

It is not expected to answer all questions today. Goals include:

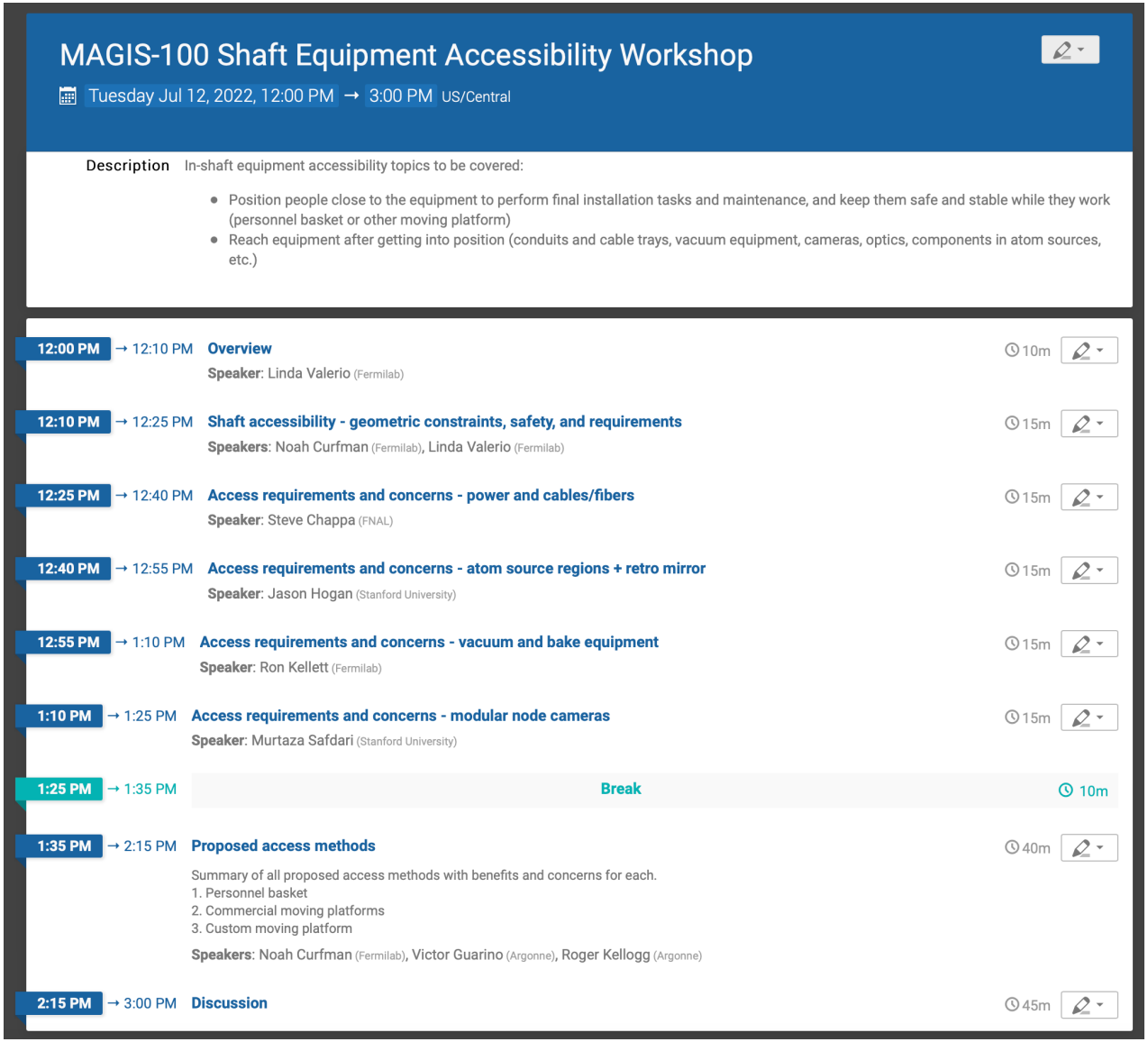
- Confirm all access challenges and requirements are identified.

- Discuss and select the most promising solutions to pursue.

To stay on schedule, please minimize interruptions to speakers unless brief clarifications are needed. Facts will be presented first, then discussion is scheduled for the final portion of the workshop.

At conclusion of workshop, you are encouraged to send your list of remaining questions/concerns to Linda to compile and share. This will guide our next efforts.

Workshop agenda



MAGIS-100 Shaft Equipment Accessibility Workshop

Tuesday Jul 12, 2022, 12:00 PM → 3:00 PM US/Central

Description In-shaft equipment accessibility topics to be covered:

- Position people close to the equipment to perform final installation tasks and maintenance, and keep them safe and stable while they work (personnel basket or other moving platform)
- Reach equipment after getting into position (conduits and cable trays, vacuum equipment, cameras, optics, components in atom sources, etc.)

12:00 PM → 12:10 PM	**Overview** **Speaker**: Linda Valerio (Fermilab)	10m
12:10 PM → 12:25 PM	**Shaft accessibility - geometric constraints, safety, and requirements** **Speakers**: Noah Curfman (Fermilab), Linda Valerio (Fermilab)	15m
12:25 PM → 12:40 PM	**Access requirements and concerns - power and cables/fibers** **Speaker**: Steve Chappa (FNAL)	15m
12:40 PM → 12:55 PM	**Access requirements and concerns - atom source regions + retro mirror** **Speaker**: Jason Hogan (Stanford University)	15m
12:55 PM → 1:10 PM	**Access requirements and concerns - vacuum and bake equipment** **Speaker**: Ron Kellett (Fermilab)	15m
1:10 PM → 1:25 PM	**Access requirements and concerns - modular node cameras** **Speaker**: Murtaza Safdari (Stanford University)	15m
1:25 PM → 1:35 PM	**Break**	10m
1:35 PM → 2:15 PM	**Proposed access methods** Summary of all proposed access methods with benefits and concerns for each. 1. Personnel basket 2. Commercial moving platforms 3. Custom moving platform **Speakers**: Noah Curfman (Fermilab), Victor Guarino (Argonne), Roger Kellogg (Argonne)	40m
2:15 PM → 3:00 PM	**Discussion**	45m

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