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# Jlab Engineering Division Professional Development Program

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# Program Introduction

- **Intro to JLab**
  - Nuclear Physics Research – Funded by DOE
  - CEBAF is the core machine – 6 GeV
  - 12 GeV upgrade – double CEBAF energy/>\$300 million.
  - FEL – world’s most powerful tunable laser.
  - Engineering Division - ~180 staff
- **Seminar Series History/Mission**
  - Staff Development – expanded to external
  - CEC class – “a start but not the end”

# Program Introduction

- This Series

- 1/25 Cryogenics at JLab – R. Ganni
- 2/8 Cycle Design/Carnot Analysis – R. Ganni
- 2/22 System Optimization/Ganni Cycle – R. Ganni
- 3/8 2K Systems – LN2 – Components – R. Ganni
- 3/22 Instr/Controls/Design – J. Creel, R. Ganni
- 4/5 Small 2K System Design – P. Knudsen
- 4/19 Helium Purification – M. Wright
- 4/26 12 GeV Cryo System Planning – D. Arenius

- Attendance/CEU's

- 8 CEU's – can miss 2 sessions
- We can furnish the necessary documentation for you to obtain CEU's – Certificate of Completion

# Logistics

- **Documentation**
  - Handouts and binders
- **Safety Considerations**
  - Exits – Muster Points
  - 911
- **Contacts/Feedback**
  - Me, Tonya, Marissa, Gayle
  - Survey forms and informal
- **Introductions**
  - You
  - Our Speaker