Please join us for the inaugural Yale Instrumentation Lunch on "Quantum Sensors: Opportunities and Applications". The Yale Instrumentation Lunch aims to bring together researchers from across campus to discuss topics related to novel instrumentation. The objectives are to foster interdepartmental connections and identify new opportunities in instrumentation.

Quantum Sensors: Opportunities and Applications
February 19, 2019 at 12:00 p.m. in Wright Lab WL-216

Yale instrumentation website: http://instrumentation.yale.edu/
Quantum Sensors: Opportunities and Applications

• **Objectives**
  – bring together researchers from across campus
  – learn about work on campus
  – foster interdepartmental connections
  – identify new opportunities in instrumentation and cross-cutting needs
  – develop a strategic approach to priority areas

• **Context**
  – quantum technologies and sensor are key to some of the forefront developments here on campus (YQI, WL)
  – quantum information science is one of the biggest growth areas in funding right now
  – many ongoing and parallel initiatives (how can we benefit from each other and leverage collective strength?)
Quantum Sensors: Opportunities and Applications

• **Agenda**
  – pedagogical introductions
  – quantum sensors in research
  – partnerships and opportunities for collaboration
  – discussion

• **Questions/Topics**
  – what are the quantum sensors/technologies you currently use?
  – what are the next steps you envision in the development of quantum sensors/instrumentation?
  – what can Yale do to help enable the next steps?

• **Communication (products of lunch)**
  – *slides* will be made available online
  – *groups.io*: email list/online forum for message and exchange
Building an Instrumentation Community at Yale

quantum@yaleinstrumentation.groups.io

Group Description
A subgroup of the Yale Instrumentation Group for discussion of quantum sensors and technology.

Group Information
- 4 Members
- 0 Topics
- Started on 7:18am
- Feed

Group Settings
- This is a subgroup of main.
- All subscribers can post to the group.
- Posts to this group do not require approval from the moderators.
- Posts from new users require approval from the moderators.
- Messages are set to reply to group.
- Subscriptions to this group do not require approval from the moderators.
- Archives are visible to anyone.
- Wiki is visible to subscribers only.
- Members can edit their posts.
- Members can set their subscriptions to no email.
Quantum Sensors: Yale and the World

Yale SCHOOL OF ENGINEERING & APPLIED SCIENCE

partnerships

Fermilab

BROOKHAVEN NATIONAL LABORATORY

JILA

campus community
departments

Applied Physics
Physics
Electrical Engineering
Computer Science

scientific topics

quantum computing
axion searches
macroscopic quantum states
neutrino properties
test of fundamental physics

Karsten Heeger, Yale University
Wright Laboratory, February 19, 2019