



## Savas Gider Senior Hardware Engineer, Apple Inc.

## April 11, 2018 at 1:00 p.m. in WL-216

## Solid state physics in the wild

Discoveries in solid state usually start inside a lab where the environment can be controlled. Many years are required to make a device reproducibly and reliably to survive outside the lab. Among the successes of solid state physics are integrated circuits and optical devices in the areas of information processing and communication. Other applications are less visible even while they are used on a daily basis. Magnetism has been the basis of information storage for over 50 years and has been used more recently to make memories such as magnetic RAM (MRAM). Although silicon is known primarily as an electrical material, it has excellent mechanical properties that can be exploited in MEMS (Microelectromechanical Systems) devices such as resonators and sensors. However, the success of solid state devices is not due to physics alone; it is a collaborative effort across disciplines including chemistry, engineering, and math.

Savas Gider received a B.S. and an M.Eng. in Applied & Engineering Physics from Cornell University and a Ph.D. in Physics from UC Santa Barbara specializing in experimental condensed matter and low temperature physics. After a post-doc at the IBM Research Division, he worked at several Silicon Valley companies: IBM Storage Division/HGST, Western Digital, SiTime, and presently, Apple.

Host: Danielle Norcini, YPPDO

Lunch is served in WLC-245 starting at 12:30 p.m. RSVP requested.

Sponsored by the Yale Wright Laboratory and the Yale Physics Department.