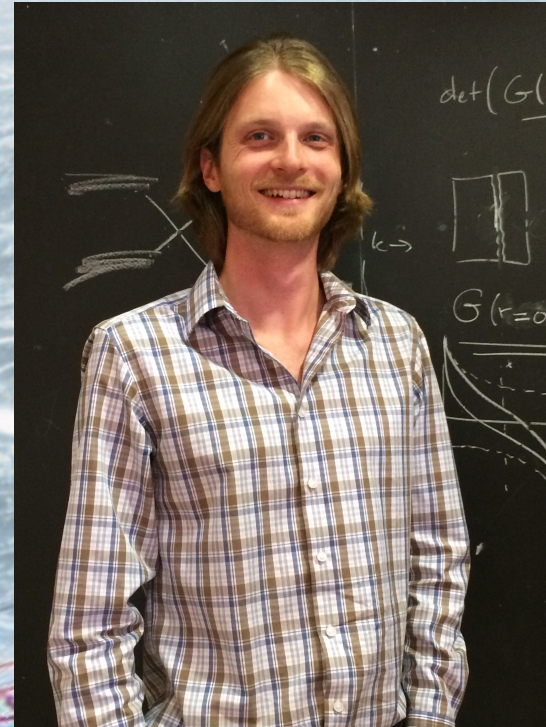


Café KITP presents

# Quasiparticles: The Dreams That Stuff Is Made Of

Matter is made of particles flying like tiny billiard balls through empty space, right? “No” said Paul Dirac: the vacuum is actually not empty, rather it looks like an infinitely deep sea. ‘Elementary’ particles like electrons and protons are just ripples on this Dirac sea. Since then physicists have discovered that the vacuum is not unique: each choice of vacuum leads to new elementary particles, the so-called *quasiparticles*. Louk Rademaker, a KITP condensed matter physicist, will guide a tour of phonons, excitons, magnons, Higgses, and other crazy-ons, and show that these wild notions are as real as the modern technology that depends on them.



Wednesday, May 6, 2015

6:00 – 7:30 pm, doors open at 5 pm

SOHO Restaurant and Music Club

in Victoria Court

1221 State Street (upstairs), Santa Barbara

<http://www.sohosb.com/>

For info, contact Greg Huber ([huber@kitp.ucsb.edu](mailto:huber@kitp.ucsb.edu))



The Kavli Institute for  
Theoretical Physics

University of California, Santa Barbara