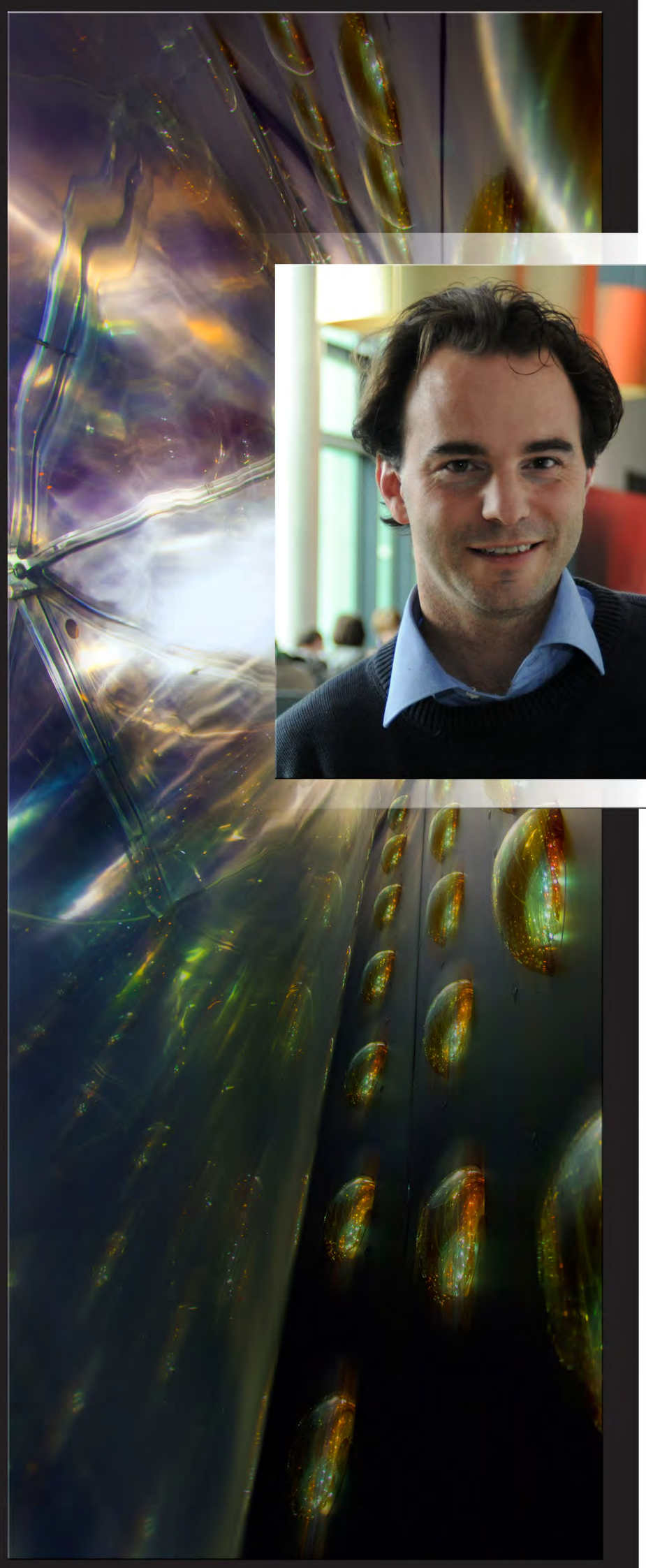
Keck INSTITUTE FOR SPACE STUDIES



The Keck Institute for Space Studies
presents an open lecture:

Quantum Experiments in Space

From Quantum Technology to Quantum Foundations

Professor Markus Aspelmeyer
University of Vienna

Wednesday, June 27, 2012
4:30 pm: refreshments
5:00 pm: lecture
Lees-Kubota Lecture Hall
Guggenheim Building
California Institute of Technology

Satellite-based platforms offer unique opportunities
for quantum science. They provide global coverage
for quantum communication - for example,
quantum cryptography links between arbitrary nodes.

In addition, the possibility to combine
low temperature and low pressure in a sustained
micro-gravity environment makes space
an unmatched 'laboratory' for
new fundamental tests on the foundations of quantum physics.

Professor Aspelmeyer will discuss the
perspectives for bringing quantum experiments into space
and report on the status of some of the
ongoing projects around the world.

Surprisingly, many available quantum technologies
are already compatible with the requirements for space missions.

for more information
go to:
www.kiss.caltech.edu

No registration is required for this free lecture.
Seating is limited and is available on a first come, first served basis.