



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

ARNOLD SOMMERFELD
CENTER FOR THEORETICAL PHYSICS



Arnold Sommerfeld Lecture Series

Professor Hitoshi Murayama
UC and LBL Berkeley, USA
& Kavli IPMU, Tokyo, Japan

Theory Colloquium:

When a Symmetry Breaks

Spontaneous Symmetry Breaking is a very universal concept applicable for a wide range of subjects: crystal, superfluid, neutron stars, Higgs boson, magnets, and many others. Yet there is a variety in the spectrum of gapless excitations even when the symmetry breaking patterns are the same. We unified all known examples of internal symmetries in a single-line Lagrangian of the low-energy effective theory. In addition, we now have a better understanding of what happens with spacetime symmetries, and predict gaps for certain states exactly based on symmetries alone.

Wednesday, July 24, 2019, 16:15 h, Room A348, Theresienstr. 37, LMU