Origins of Mass

报告人 Prof. Frank Wilczek

时间: 2014年 10月 10日下午4时

地点:清华大学中央主楼接待厅

报告摘要

In Newtonian physics mass is a primary and irreducible property, but
in modern physics we can trace its origin, in important cases, to more
basic principles. I will discuss our modern understanding of the
origin of most of the mass of ordinary matter as energy, within QCD.
I will also discuss another the generation of mass through the Higgs
mechanism, highlighting recent discoveries. Finally, I will discuss
forms of mass for which deep understanding is presently lacking.



Frank Wilczek is Herman Feshback Professor of physics at MIT. He received his PhD degree in 1974 from Princeton University. He received many honors, including the Nobel Prize (2004), the King Faisal International Prize (2005), and others. His research



T. F. Hoang Lectures

清华大学高等研究院

黄长风讲座

Institute for Advanced Study

has greatly contributed to the success of the Standard Model of

particle physics.