

复旦大学物理系 Colloquium

Time: 14:00, Tuesday, 2026.11.03

Location: C108, Jiangwan Physics Building

Behind small is big: neutrinos as an example

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摘要： Real word is made of the first-family leptons and quarks which are all small in size and light in weight. But it is often true in physics that small quantities at low energies may originate from new heavy degrees of freedom, a bright idea which looks like the "seesaw" and takes effect via nearest neighbor interactions. The present talk will illustrate this point of view with two examples, and then focus on the standard model effective field theory and the Minkowski mechanism to interpret why neutrinos must have the Majorana nature and tiny masses. Brief comments will also be given on neutrinos as a tool to probe some known unknowns.



报告人简介： Bachelor's degree in 1987 from Peking University, Ph.D. in 1993 from IHEP, Chinese Academy of Sciences. Postdoctoral fellows at Munich University (1993 — 1996) and Nagoya University (1996 — 1998), and research associate at Munich University (1998 — 2001). A senior researcher at IHEP since 2001. Main research interest is in theoretical particle physics, especially on flavor structures and neutrino physics. A recipient of the 2024 Kan Chang Wang Physics Prize of the Chinese Physics Society.