

Abstract Submitted  
for the APR13 Meeting of  
The American Physical Society

**Composite description of standard-model particles** JAIME BESPROSVANY, Instituto de Fisica, Universidad Nacional Autonoma de Mexico — Finding the Higgs boson, a scalar particle of which there are experimental clues, would confirm the mass-generation mechanism in the standard model. The standard model successfully predicts mass values for the W and Z bosons that carry the short-range electroweak interaction. However, the scalar boson and fermion masses are unknowns as their masses arise from independent Lagrangian terms. The similar order of magnitude of the masses of the W, Z, top quark, and the recently measured scalar excitation, suggests connections among them. Here we present a composite model that describes these particles, based on their properties.

Jaime Besprosvany  
Instituto de Fisica, Universidad Nacional Autonoma de Mexico

Date submitted: 11 Jan 2013

Electronic form version 1.4