
Speaker:	Robert Szafron
Title:	<i>New Physics searches with muons</i>
Date:	12 May 2017
Time:	14:15
Place:	Minkowski room

Abstract

In my talk, I will discuss a possibility of discovering beyond the Standard Model Physics in experiments involving muons. I will focus on the searches for the charged lepton flavor violation. In particular, I will discuss the decay of muonic atoms which play a significant role in searches for the muon-electron coherent conversion.

Muonic atoms share many similarities with heavy quark systems. I will show how effective field theory tools and methods, developed to describe heavy quark bound states, can also be used in calculations of the bound muon decay.

I will present recent results for a muon bound with an aluminum nucleus, the planned target in muon-electron conversion searches.
