

李政道研究所-粒子核物理研究所特别演讲

TDLI & INPAC Experimental Particle Physics Special Seminar

The W Boson Mass as door to physics beyond the Standard Model

Abstract

The recent publication of the new W boson mass measurement of the CDF collaboration shows a 7 sigma discrepancy to the Standard Model prediction. In this talk, I will revise the indirekt determination of the W boson mass with the global electroweak fit and discuss the measurement principle at hadron colliders. Special emphasis will be drawn to the most precise measurement of the ATLAS collaboration as well as potential approaches to improve the precision even further. In addition, possible additional studies in context of the new CDF measurements will be proposed.

Prof. Dr. Matthias Schott
Johannes Gutenberg University of Mainz, Germany

Biography



- Since September 2019: Full Professor (W3), Johannes Gutenberg University, Mainz, Germany
- Since February 2013: Lichtenberg Professor (Tenured since 2018), Johannes Gutenberg University, Mainz, Germany
- Sept 2012 – Jan 2013: Emmy-Noether Research Group Leader (DFG), Johannes Gutenberg University, Mainz, Germany
- June 2010 – Aug 2012: Research Staff (LD), CERN, Geneva/Switzerland
- April 2008 – May 2010: Research Fellow, CERN, Geneva/Switzerland
- July 2007 – Jan. 2008: Postdoctoral Researcher, Ludwig-Maximilian-University, Munich/Germany
- Sept. 2004 – July 2007: Doctorate Studies in Physics (with distinction), Ludwig-Maximilian-University, Munich/Germany and CERN
- Oct. 1999 - May 2004: Physics diploma (Grade: 1.0) , Friedrich-Alexander-University, Erlangen/Germany

Time: 15:00 Wednesday, April 27, 2022

Online: <https://cern.zoom.us/j/63837720185?pwd=TFBvcUlyWGh6cS8xT0lzNUtYS0Vxdz09> (ID: 638 3772 0185, Password: 123456)

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