



OAW

Österreichische Akademie
der Wissenschaften

INVITATION

HEPHY-SMI seminar on
fundamental interactions and symmetries

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Hadronic contributions to the muon $g-2$

ABSTRACT:

A several year old discrepancy at the 2-3 sigma level between precision Standard Model computations of the muon's magnetic moment and experimental measurement defies theory. I quickly review the last measurements, the various contributions to the theory estimate that include a mind-boggling 5-loop QED calculation as well as high-order QCD and electroweak corrections, and concentrate especially on the hadronic contributions. I will show how progress in the Dyson-Schwinger formulation of Chromodynamics provides a cross-check, extension and improvement over future lattice and existing quark model and effective Lagrangian estimates, highlighting the strengths and weaknesses of the various approaches.

DATE:

Wednesday, 21.11.2012 - 17:00 s.t.

VENUE:

Stefan Meyer Institute
for subatomic Physics
1090 Wien, Boltzmannngasse 3
Seminarraum 2.08

<http://www.smi.oeaw.ac.at/groups/hephysmiseminar/>



Stefan-Meyer-Institut
für subatomare Physik



HEPHY
Institut für Hochenergiephysik

