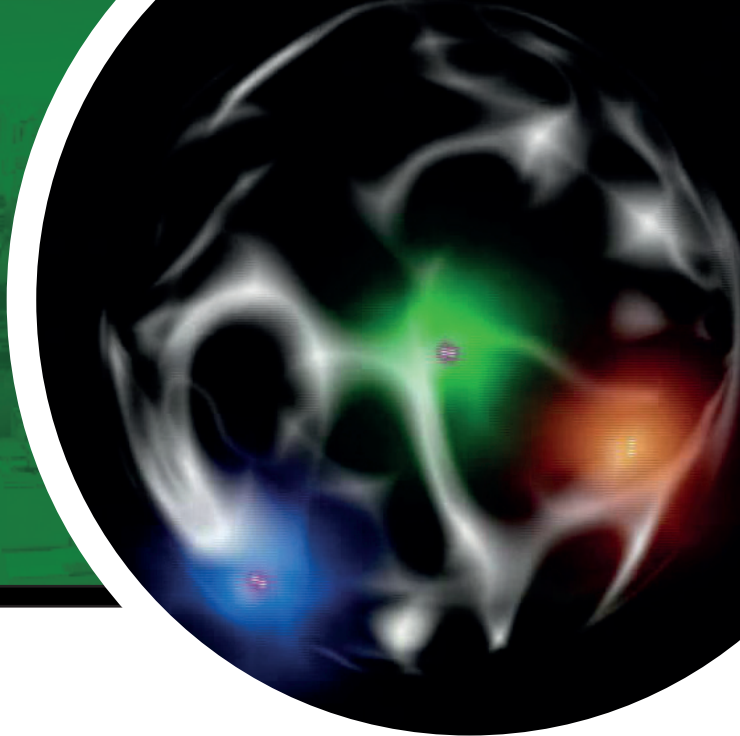




International Centre
for Theoretical Physics
South American Institute
for Fundamental Research

WORKSHOP ON DETERMINATION OF FUNDAMENTAL QCD PARAMETERS



September 30 – October 4, 2019
at Instituto de Física Teórica - UNESP, São Paulo, Brazil

LECTURERS

Nora Brambilla (Technische U. München, Germany)
Attilio Cucchieri (IF de São Carlos – USP, Brazil)
David D’Enterria* (CERN, Switzerland)
Cesareo Dominguez (U. of Capen Town, South Africa)
Aida El-Khadra (U. of Illinois Urbana-Champaign, USA)
Jens Erler (U. Nacional Autónoma de México, Mexico)
Daniel de Florian (ICAS – U. Nacional de San Martin, Argentina)
Shoji Hashimoto (KEK – Tsukuba, Japan)
Christian Hoelbling (U. Wuppertal, Germany)
Zahari Kassabov* (University of Cambridge, UK)
Yuichiro Kiyo (Juntendo U., Japan)
Christopher Lee (Los Alamos National Laboratory, USA)
Andreas Maier (DESY Zeuthen, Germany)
Kim Maltman (York U., Canada & U. of Adelaide, Australia)
Peter Marquard* (DESY Zeuthen, Germany)
Pere Masjuan (U. Autònoma de Barcelona, Spain)
Aditya Pathak (U. of Vienna, Austria)
Santiago Peris (U. Autònoma de Barcelona, Spain)
Peter Petreczky (Brookhaven National Laboratory, USA)
Antonio Pineda (U. Autònoma de Barcelona, Spain)
Alberto Ramos* (Trinity College Dublin, Ireland)
Angelika Widl (U. of Vienna, Austria)

*to be confirmed

QCD is the established theory for the strong interactions. At present, our knowledge of the QCD parameters, namely the quark masses and the strong coupling, α_s , is the limiting factor in increasing the precision of several calculations within the Standard Model. In the absence of direct evidence for new physics at the LHC, precision calculations remain a possible route for unveiling Beyond Standard Model physics. Topics that will be covered in this workshop include:

1. State-of-the-art extractions of α_s and quark masses.
2. Theoretical developments and tools for α_s and quark-mass determinations, on the lattice and in the continuum.
3. The impact of QCD parameters in calculations within and beyond the SM. Can we reach the required precision?

In parallel to this activity, ICTP-SAIFR is organizing a program on particle physics.

There is no registration fee.

Registration deadline:

July 21, 2019

Online registration form and information:

<http://www.ictp-saifr.org/QCDp2019>



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(IF de São Carlos – USP, Brazil)
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