

Scale setting: Precision lattice QCD for particle and nuclear physics

Report of Contributions

Contribution ID: 1

Type: **not specified**

Registration

Contribution ID: 2

Type: **not specified**

Registration

Monday, March 3, 2025 8:15 AM (30 minutes)

Contribution ID: 3

Type: **not specified**

Workshop introduction

Monday, March 3, 2025 8:45 AM (15 minutes)

Presenter: BAZAVOV, Alexei (Michigan State University, United States)

Session Classification: Workshop introduction

Contribution ID: 4

Type: **not specified**

Welcome by the ECT* director

Monday, March 3, 2025 9:00 AM (15 minutes)

Presenter: VAN KOLCK, Ubirajara (IJCLab Orsay & University of Arizona)

Session Classification: Workshop introduction

Contribution ID: 5

Type: **not specified**

Scale setting: motivation and FLAG overview

Monday, March 3, 2025 9:15 AM (45 minutes)

Presenters: BAZAVOV, Alexei (Michigan State University, United States); SOMMER, Rainer (DESY & Humboldt University); COLLINS, Sara (University of Regensburg)

Session Classification: Workshop introduction

Contribution ID: 6

Type: **not specified**

Edinburgh Consensus

Monday, March 3, 2025 10:00 AM (30 minutes)

Presenter: RAMOS, Alberto (IFIC)

Session Classification: Workshop introduction

Contribution ID: 7

Type: **not specified**

The determination of potential scales r_0 and r_1 in 2+1 flavor QCD

Monday, March 3, 2025 11:00 AM (1 hour)

Presenter: ASMUSSEN, Tom (University of Wuppertal)

Session Classification: Potential scales

Contribution ID: 8

Type: **not specified**

TUMQCD scale setting status

Monday, March 3, 2025 1:30 PM (1h 15m)

Presenters: MAYER-STEUDTE, Julian (Technical University Munich); LEINO, Viljami (Johannes Gutenberg Universität Mainz)

Session Classification: Potential scales

Contribution ID: 9

Type: **not specified**

Discussion of potential scales

Monday, March 3, 2025 2:45 PM (45 minutes)

Presenter: BALI, Gunnar

Session Classification: Potential scales

Contribution ID: **10**

Type: **not specified**

Scale setting with gradient flow on (2+1)-flavor HISQ ensembles

Monday, March 3, 2025 4:00 PM (1 hour)

Presenter: WEBER, Johannes Heinrich (Technische Universität Darmstadt)

Session Classification: Gradient flow scales from leptonic decays

Contribution ID: 11

Type: **not specified**

Setting the lattice scale from a combination of Wilson and Wilson twisted mass valence quarks

Presenter: SAEZ, Alejandro (University of Valencia - IFIC)

Session Classification: Gradient flow scales from leptonic decays

Contribution ID: 12

Type: **not specified**

Setting the lattice scale from a combination of Wilson and Wilson twisted mass valence quarks

Tuesday, March 4, 2025 10:30 AM (1 hour)

Presenter: SAEZ, Alejandro (University of Valencia - IFIC)

Session Classification: Gradient flow scales from leptonic decays

Contribution ID: 13

Type: **not specified**

Setting the scale of $N_f = 2 + 1 + 1$ ensembles at the isoQCD physical point

Tuesday, March 4, 2025 11:30 AM (1 hour)

Presenter: ROMITI, Simone (Uni-Bonn)

Session Classification: Gradient flow scales from leptonic decays

Contribution ID: 14

Type: **not specified**

Testing universality in gauge theories

Tuesday, March 4, 2025 4:00 PM (1 hour)

Presenter: RAMOS, Alberto (IFIC)

Contribution ID: 15

Type: **not specified**

Updates from CalLat/CoSMoN

Wednesday, March 5, 2025 9:00 AM (1 hour)

Presenter: MILLER, Nolan (Helmholtz-Institut Mainz)

Session Classification: Gradient flow scales from the Omega baryon mass

Contribution ID: 16

Type: **not specified**

New configuration set of HAL QCD collaboration

Wednesday, March 5, 2025 10:30 AM (1 hour)

Presenter: ITOU, Etsuko (RIKEN)

Session Classification: Gradient flow scales from the Omega baryon mass

Contribution ID: 17

Type: **not specified**

Scale-setting from precise Omega baryons

Wednesday, March 5, 2025 11:30 AM (1 hour)

Presenter: MOHLER, Daniel

Session Classification: Gradient flow scales from the Omega baryon mass

Contribution ID: **18**

Type: **not specified**

The Prony Generalised Eigenvalue Method

Wednesday, March 5, 2025 2:00 PM (1 hour)

Presenter: URBACH, Carsten (University of Bonn)

Contribution ID: 19

Type: **not specified**

Discussion of baryon systematics

Wednesday, March 5, 2025 3:30 PM (1h 30m)

Presenter: COLLINS, Sara (University of Regensburg)

Session Classification: Gradient flow scales from the Omega baryon mass

Contribution ID: 20

Type: **not specified**

Status of High Precision Scale Setting for RBC/UKQCD

Thursday, March 6, 2025 9:00 AM (1 hour)

Presenter: PARRINO, Julian (Universität Regensburg)

Session Classification: Gradient flow scales from the Omega baryon mass

Contribution ID: 21

Type: **not specified**

High-Precision Scale Setting with the Omega Baryon

Thursday, March 6, 2025 10:30 AM (1 hour)

Presenter: GREBE, Anthony (Fermi National Accelerator Laboratory)

Session Classification: Gradient flow scales from the Omega baryon mass

Contribution ID: 22

Type: **not specified**

Determination of a gradient flow scale

Thursday, March 6, 2025 11:30 AM (1 hour)

Presenter: SZABO, Kalman (Forschungszentrum Juelich)

Session Classification: Gradient flow scales from the Omega baryon mass

Contribution ID: 23

Type: **not specified**

Isospin breaking effects in the leptonic decays of light mesons

Thursday, March 6, 2025 2:00 PM (1 hour)

Presenter: DI CARLO, Matteo (CERN)

Session Classification: Isospin breaking effects

Contribution ID: 24

Type: **not specified**

Discussion of isospin breaking effects

Thursday, March 6, 2025 3:00 PM (1 hour)

Presenter: SOMMER, Rainer (DESY & Humboldt University)

Session Classification: Isospin breaking effects

Contribution ID: 25

Type: **not specified**

Discussion of isospin breaking effects

Presenter: SOMMER, Rainer (DESY & Humboldt University)

Session Classification: Isospin breaking effects

Contribution ID: 26

Type: **not specified**

Scale setting from the octet baryon spectrum on Nf=2+1 CLS ensembles

Friday, March 7, 2025 9:00 AM (1 hour)

Presenter: BALI, Gunnar

Session Classification: Gradient flow scales from the octet baryon spectrum

Contribution ID: 27

Type: **not specified**

Baryon masses in covariant chiral perturbation theory

Presenter: REN, Xiu-Lei (Helmholtz-Institut Mainz)

Contribution ID: 28

Type: **not specified**

Baryon masses in covariant chiral perturbation theory

Friday, March 7, 2025 10:30 AM (1 hour)

Presenter: REN, Xiu-Lei (Helmholtz-Institut Mainz)

Session Classification: Chiral perturbation theory

Contribution ID: 29

Type: **not specified**

Discussion of convergence of ChPT for baryons

Friday, March 7, 2025 11:30 AM (1 hour)

Presenter: COLLINS, Sara (University of Regensburg)

Session Classification: Chiral perturbation theory

Contribution ID: **30**

Type: **not specified**

Workshop summary

Friday, March 7, 2025 12:30 PM (30 minutes)

Contribution ID: 31

Type: **not specified**

Discussion of gradient flow scales from leptonic decays

Tuesday, March 4, 2025 2:00 PM (1h 30m)

Presenter: BAZAVOV, Alexei (Michigan State University, United States)

Session Classification: Gradient flow scales from leptonic decays

Contribution ID: 32

Type: **not specified**

Scale setting for CLS 2+1 simulations

Tuesday, March 4, 2025 9:00 AM (1 hour)

Presenter: KORZEC, Tomasz (University Wuppertal)

Session Classification: Gradient flow scales from leptonic decays

Contribution ID: 33

Type: **not specified**

Workshop dinner at restaurant Due Mori

Tuesday, March 4, 2025 8:00 PM (2 hours)

Contribution ID: **34**

Type: **not specified**

Workshop dinner at restaurant Scigno del Duomo

Thursday, March 6, 2025 8:00 PM (2 hours)

Contribution ID: 35

Type: **not specified**

Continuum limit of generalized charm susceptibilities

Thursday, March 6, 2025 4:20 PM (40 minutes)

Presenter: SHARMA, Sipaz (TUM)