

Topology & Confinement

Monday 4:20 - 6:00 Tilo Wettig

Nigel Cundy
Eduardo Follana

James Hetrick
Yoshiaki Koma

Stefan Solbrig

Synge Lecture Theatre

Low eigenvalue topology with dynamical overlap fermions
Index Theorem and Random Matrix Theory for Improved Staggered Quarks
More evidence of localization in the low-lying Dirac spectrum
Localization properties of low lying eigenmodes of overlap fermions in $T=0$ gluodynamics
Topologically non-trivial field configurations - interplay of vortices and Dirac eigenmodes

Tuesday 4:00 - 6:00 Jan Smit

Hideo Nakajima

Takuya Saito
Pierre van Baal
Falk Bruckmann
Ernst-Michael Ilgenfritz

Katsuya Ishiguro

Maxwell Lecture Theatre

Color confinement in lattice Landau gauge with unquenched Wilson and KS fermions
Lattice study of color confinement mechanism in Coulomb gauge
Instanton Quarks and Confinement
Laplacian modes for calorons and as a filter
Topological clusters in $SU(2)$ gluodynamics at finite temperature and the evidence for KvB calorons
The dual Meissner effect and finite temperature phase transition in quenched $SU(2)$ QCD

Wednesday 9:00 - 10:40 Rich Brower

Gunnar Bali
Michele Caselle
Markus Mechtel
Terry E. Tomboulis

Nayasinganahalli Desikachar Hari Dass

Synge Lecture Theatre

The Anatomy of String Breaking
QCD string from D0 branes
Nonperturbative investigation of the diquark potential
RG decimation-based approach to confinement and computation on coarse lattices
High accuracy simulations of $d=4$ $SU(3)$ qcd-string

Wednesday 10:55 - 11:55 (i) Mikhail Polikarpov

Dmitri Grigoriev
Lorenz von Smekal
Marc Wagner

Synge Lecture Theatre

Real-time dynamics of proton decay
A toy model story of (grand) unified monopoles
The pseudoparticle approach for solving path integrals in gauge theories

Wednesday 10:55 - 11:55 (ii) Ernst-Michael Ilgenfritz

Bartolome Alles

Tetsuya Onogi

Ivan Horvath

Salmon Lecture Theatre

Study of the systematic errors in the calculation of renormalization constants of the topological susceptibility on the lattice
The parameter dependence of the topology change and the scaling properties of the topology conserving gauge action
Calculation of Overlap-Based Topological Charge Density Correlator in Pure-Glue QCD

Thursday 4:20 - 6:00 Uwe-Jens Wiese

Michael Engelhardt

Markus Quandt
Hugo Reinhardt
Maxim Chernodub

Synge Lecture Theatre

String tensions and deconfinement transition in the $SU(4)$ center vortex model
Center Vortex Model for $SU(3)$ Yang-Mills Theory
The Center Vortex Field Propagator
Liquid crystal defects of Yang-Mills theory in Landau Gauge

Philippe de Forcrand
Hank Thacker

t Hooft loops and perturbation theory
D-branes and Topological Charge Fluctuations in QCD

Friday 2:10 - 3:50 Pierre van Baal

Jeff Greensite
Sergey Syritsyn

Fedor Gubarev

Aleksey Kovalenko

Toru Sekido

Maxwell Lecture Theatre

Localization and the Covariant Lattice Laplacian
Eigenmodes of Covariant Laplacian in SU(2) Yang-Mills Vacuum:
Higher Representations
Bianchi Identities and Chromomagnetic Fields Degeneracy in
SU(2) Gluodynamics
Three dimensional vacuum domains in four dimensional SU(2)
gluodynamics
The dual Meissner effect in pure SU(2) with Landau gauge fixing

Friday 4:20 - 6:00 Ivan Horvath

Christian S. Fischer
Seikou Kato

Akihiro Shibata

Andre Sternbeck
Torsten Tok

Salmon Lecture Theatre

Infrared exponents of Yang-Mills theory
Understanding the U(1) problem through dyon configuration in the
Abelian projection
Cho-Faddeev-Niemi decomposition of lattice Yang-Mills theory
and evidence of a novel magnetic condensation
Studying the infrared region in Landau gauge QCD
The Gluon Propagator in Lattice Landau Gauge with twisted
boundary conditions

Posters

Giuseppe Burgio
Paolo Cea
Gyozo Egri
Sadataka Furui

Stefano Lottini
Stefan Olejnik
Marco Panero

Arwed Schiller

Tsuneo Suzuki

Ergodic SO(3), monopole condensation and vortex free energy
Deconfinement phase transitions in external fields
Topology with Dynamical Overlap Fermions
The running coupling in lattice Landau gauge with unquenched
Wilson fermion and KS fermion
The glue-ball spectrum of pure percolation
Gribov horizon under the (lattice) microscope
Studying glueball masses in non-Abelian LGT with the LW
algorithm
Topological and phase structure of an effective double-Higgs
model for high- T_c superconductivity and gluodynamics
Color confinement mechanism and the vacuum type of SU(2)
gluodynamics