

# Workshop: Continuum and Lattice Approaches to the Infrared Behavior of Conformal and Quasi-Conformal Gauge Theories

Events for:  
Monday, January 8th - Friday, January 12th

## Monday, January 8th

9:00am **Welcome Speeches - SCGP 102**

**Title:** Welcome from the organizers

9:30am **Benjamin Grinstein - SCGP 102**

**Title:** Light Dilatons, Impostors, and the Relation Between Scale and Conformal Invariance

10:30am **Coffee Break - Cafe**

11:00am **Ethan Neil - SCGP 102**

**Title:** Light Composite Scalar in SU(3) Lattice Gauge Theory with  $N_f = 8$  Fermions in the Fundamental Representation

12:00pm **Lunch - Cafe**

1:30pm **Anna Hasenfratz - SCGP 102**

**Title:** Violation of Fermion Universality at a Conformal Fixed Point

2:30pm **Coffee Break - cafe**

3:00pm **Enrico Rinaldi - SCGP 102**

**Title:** Exploring Signals of Conformality in Theories With Many Flavors: A LatKMI Report.

## Tuesday, January 9th

9:00am **Francesco Sannino - SCGP 102**

**Title:** Charting Fundamental Interactions: Safety Guaranteed and Fundamental Composite Dynamics

10:00am **Coffee Break - cafe**

10:30am **Julius Kuti - SCGP 102**

**Title:** Sigma Particle or Dilaton?

11:30am **Lunch - cafe**

1:00pm **SCGP Weekly Talk - George Fleming - SCGP 102**

**Title:** Progress in Studies of Conformal and Quasiconformal Gauge Theories

2:00pm **Claudio Pica - SCGP 102**

**Title:** Lattice Models of Composite Higgs Dynamics

3:00pm **Coffee Break - Cafe**

3:30pm **Robert Shrock - SCGP 102**

**Title:** Higher-Order Calculations at Infrared Fixed Points in Gauge Theories

### Wednesday, January 10th

9:00am **Meenakshi Narain - SCGP 102**

**Title:** CMS Searches for Resonances Decaying to WW/WZ

10:00am **Coffee Break - Cafe**

10:30am **Ines Ochoa - SCGP 102**

**Title:** ATLAS Searches for Resonances Decaying to WW/WZ

11:30am **Kenneth Lane - SCGP 102**

**Title:** The Phenomenology of a Composite Higgs Boson - Vector Diboson Resonances

12:30pm **Lunch - Cafe**

2:00pm **Thomas A Rytov - SCGP 102**

**Title:** Scheme-Independent Calculations of Conformal Infrared Behavior in Nonsupersymmetric and Supersymmetric Gauge Theories

3:00pm **Coffee Break - Cafe**

3:30pm **Kimo Tuominen - SCGP 102**

**Title:** Infrared Behavior of SU(2) Gauge Theory with Fermions

6:00pm **Conference Banquet - Cafe**

**Thursday, January 11th**

9:00am **D. R. T. Jones - SCGP 102**

**Title:** Renormalisable and Asymptotically Free Quantum Gravity

10:00am **Coffee Break - Cafe**

10:30am **John Gracey - SCGP 102**

**Title:** Fixed point Analyses for Banks-Zaks Critically and Models of Graphene

11:30am **Richard Brower - SCGP 102**

**Title:** Lattice Construction for Conformal Field Theory on Curved Riemann Manifolds

12:30pm **Lunch - Cafe**

2:00pm **Meifeng Lin - SCGP 102**

**Title:** The U.S. Exascale Computing Project and the Lattice Search for Conformality

3:00pm **Coffee break**

3:30pm **David Schaich - SCGP 102**

**Title:** Maximally Supersymmetric Theories on the Lattice

4:30pm **James Ingoldby - SCGP 102**

**Title:** Analysis of a Dilaton Effective Field Theory for Lattice Data

**Friday, January 12th**

9:00am **Zohar Komargodski - SCGP 102**

**Title:** The Infrared of  $(2 + 1)$ -Dimensional QCD: Confinement, Conformality, and Symmetric Breaking

10:00am **Coffee Break - Cafe**

10:30am **Vladimir Korepin - SCGP 102**

**Title:** Quantum Spin Chains and Number Theory

11:30am **Dalimil Mazac - SCGP 102**

**Title:** Conformal Field Theory, Bootstrap Methods, and Applications

12:30pm **Lunch - Cafe**

2:00pm **Xinan Zhou - SCGP 102**

**Title:** New Results in Conformal Field Theories

3:00pm **Closing Remarks - SCGP 102**

3:30pm **Tea Time - 515**