



SUSY 2003

Supersymmetry in the Desert

The 11th Annual International Conference on
Supersymmetry and the Unification of the
Fundamental Interactions

June 5-10, 2003

Tucson, Arizona

Conference Program

[All plenary talks will be held in Pima+Madera.]

Thursday, June 5

- 8:00 – 8:40 REGISTRATION
8:40 – 9:00 WELCOME
- 9:00 – 9:25 Gordy Kane (Michigan)
Questions and perspectives on issues beyond the Standard Model
- 9:30 – 9:55 Markus Luty (Maryland)
Supersymmetry without supergravity
- 10:00 – 10:25 Marc Kamionkowski (Caltech)
The CMB and SUSY dark matter
- 10:30 – 11:00 COFFEE BREAK
- 11:00 – 11:25 Giorgio Gratta (Stanford)
Experimental neutrino physics: Recent results and perspectives
- 11:30 – 11:55 Rabindra Mohapatra (Maryland)
Neutrino mass and minimal SUSY $SO(10)$
- 12:00 – 12:25 Antonio Masiero (INFN Padova)
Unification of hadronic and leptonic FCNC in SUSY
- 12:30 – 2:00 LUNCH
- 2:00 – 3:30 PARALLEL SESSIONS
- | | |
|------------|---------------|
| Session 1A | [Pima] |
| Session 5A | [Madera] |
| Session 6A | [Canyons A+B] |
| Session 3A | [Canyon C] |
- 3:30 – 4:00 COFFEE BREAK
- 4:00 – 5:40 PARALLEL SESSIONS
- | | |
|------------|---------------|
| Session 1B | [Pima] |
| Session 5B | [Madera] |
| Session 4A | [Canyons A+B] |
| Session 2A | [Canyon C] |
- 6:30 WELCOME MARGARITA RECEPTION

Friday, June 6

- 8:00 – 8:25 Kiwoon Choi (KAIST)
Gauge unification and localization in extra dimension
- 8:30 – 8:55 Marcela Carena (Fermilab)
Bulk fields in warped extra dimensions
- 9:00 – 9:25 Rob Myers (Perimeter)
Meson spectroscopy in AdS/CFT with flavor
- 9:30 – 10:00 COFFEE BREAK
- 10:00 – 10:25 Mikhail Shifman (Minnesota)
*Supersymmetric gluodynamics and its non-supersymmetric cousins:
Planar equivalence, k-strings and all that*
- 10:30 – 10:55 Vijay Balasubramanian (Penn)
Phases of N=1 supersymmetric gauge theories in four dimensions
- 11:00 – 11:25 Leonard Susskind (Stanford)
Cosmology and the string theory landscape
- 11:30 – 11:55 Michael Dine (UC Santa Cruz)
String theory and Beyond the Standard Model physics
- 12:00 – 1:30 LUNCH
- 1:30 – 1:55 Keith Olive (Minnesota)
Supersymmetric dark matter in light of WMAP
- 2:00 – 2:25 Max Tegmark (Penn)
*Dark matter, dark energy, and inflation from WMAP and the
Sloan Digital Sky Survey*
- 2:30 – 2:55 George Fuller (UC San Diego)
*Insights into neutrino masses and mixings from the early universe
and from supernovae*
- 3:00 – 3:30 COFFEE BREAK
- 3:30 – 5:00 PARALLEL SESSIONS
Session 1C [Pima]
Session 5C [Madera]
Session 7A [Canyons A+B+C]
- 7:30 EVENING SPECIAL SESSION [Ventana]
*A Discussion on the Vitality of Particle Physics:
A moderated, open discussion of key issues facing our field*

Saturday, June 7

8:00 – 8:25 Cliff Burgess (McGill)
6D supergravity and the cosmological constant

8:30 – 8:55 Nemanja Kaloper (UC Davis)
Inflation and short-distance physics

9:00 – 9:25 Shamit Kachru (Stanford)
Towards inflation in string theory

9:30 – 10:00 COFFEE BREAK

10:00 – 10:25 Ann Nelson (Washington, Seattle)
SUSY and three little Higgs stories

10:30 – 10:55 Ignatios Antoniadis (CERN)
Non-compact dimensions and localized (super)gravity

11:00 – 11:25 Eva Silverstein (Stanford)
Moduli-fixing and microphysics

11:30 – 11:55 David B. Kaplan (Washington, Seattle)
Lattice supersymmetry

12:00 – 1:30 LUNCH

1:30 – 3:00 PARALLEL SESSIONS

Session 1D	[Pima]
Session 5D	[Madera]
Session 3B	[Canyons A+B]
Session 2B	[Canyon C]

3:15 PICKUP FOR WEEKEND EXCURSION #1
(Arizona Sonora Desert Museum)

Sunday, June 8

- 8:30 – 8:55 Dan Akerib (Case Western)
Direct searches for dark matter
- 8:55 – 9:20 Steve Worm (Rutgers)
Searches for new particles and phenomena in CDF
- 9:20 – 9:45 John Hobbs (Stony Brook)
Searches for new particles and phenomena in D0
- 9:45 – 10:15 COFFEE BREAK
- 10:15 – 10:40 Yoshihide Sakai (KEK)
Results from Belle
- 10:40 – 11:05 David Hitlin (Caltech)
Results from BaBar
- 11:05 – 11:30 Thomas Alderweireld (Mons Heinaut, Belgium)
New particle searches at LEP
- 11:30 – 1:00 LUNCH
- 1:00 PICKUP FOR WEEKEND EXCURSION #2
(Pima Air & Space Museum / Titan Missile Museum)

Monday, June 9

- 8:30 – 8:55 Stephen Martin (Northern Illinois)
Accurate treatment of Higgs VEVs and masses in supersymmetry
- 9:00 – 9:25 Howie Baer (Florida State)
mSUGRA model: Indirect constraints and prospects for colliders
- 9:30 – 9:55 Stuart Raby (Ohio State)
Phenomenology of the minimal SO(10) SUSY model
- 10:00 – 10:30 COFFEE BREAK
- 10:30 – 10:55 Carlos Wagner (Argonne/Chicago)
Precision measurements, unification of couplings, and collider phenomenology
- 11:00 – 11:25 Jack Gunion (UC Davis)
Higgs physics, supersymmetry, and extra dimensions: Selected topics
- 11:30 – 11:55 Konstantin Matchev (Florida)
Bosonic supersymmetry
- 12:00 – 12:25 JoAnne Hewett (SLAC)
Phenomenology of brane-localized curvature in warped backgrounds
- 12:30 – 2:00 LUNCH
- 2:00 – 2:25 Paul Langacker (Penn)
Physics beyond the MSSM
- 2:30 – 2:55 Sacha Davidson (IPPP, Durham)
Observable consequences of thermal leptogenesis
- 3:00 – 3:25 Tony Tyson (Bell Labs, Lucent Technologies)
Physics of dark energy and dark matter from optical imaging surveys
- 3:30 – 4:00 COFFEE BREAK
- 4:00 – 5:40 PARALLEL SESSIONS
- | | |
|------------|---------------|
| Session 1E | [Pima] |
| Session 5E | [Madera] |
| Session 4B | [Canyons A+B] |
| Session 1F | [Canyon C] |
- 7:00 CONFERENCE BANQUET [Pima+Madera]

Tuesday, June 10

8:30 – 9:30 PARALLEL SESSIONS

Session 1G	[Pima]
Session 7B	[Madera]
Session 6B	[Canyons A+B]
Session 3C	[Canyon C]

9:30 – 10:00 COFFEE BREAK

10:00 – 11:40 PARALLEL SESSIONS

Session 1H	[Pima]
Session 5F	[Madera]
Session 3D	[Canyons A+B]

11:40 – 1:00 LUNCH

1:00 – 1:25 Mirjam Cvetič (Penn)

Supersymmetric intersecting D-brane world(s)

1:30 – 1:55 Mariano Quiros (IFAE, Barcelona)

Spontaneous Scherk-Schwarz symmetry breaking

2:00 – 2:25 Lawrence Hall (UC Berkeley)

Alternative cosmologies

2:30 – 2:55 Cumrun Vafa (Harvard)

Matrix models and supersymmetric field theories

3:00 – 3:30 COFFEE BREAK

3:30 – 3:55 Nima Arkani-Hamed (Harvard)

The little Higgs

4:00 – 4:25 Giorgi Dvali (NYU)

Chasing zero

4:30 – 5:00 Savas Dimopoulos (Stanford)

Anthropic selection, LHC and dark energy

5:00 **END OF CONFERENCE**

SUSY 2003 Parallel Sessions

Session 1: SUSY Phenomenology

Convenors: Jonathan Feng (UC Irvine), James Wells (Michigan)

Session 1A

Thursday, June 5, 2:00-3:20 p.m.

[Pima]

Chair: Nobuchika Okada

- 2:00 – 2:18 Sven Heinemeyer (LMU Munich)
Loop corrections to Higgs production at the LC
- 2:20 – 2:38 Seungwon Baek (KIAS)
CP violation in $B \rightarrow \phi K_S$ decay at large $\tan \beta$ in the MSSM
- 2:40 – 2:58 C.-P. Yuan (Michigan State)
Testing MSSM in the associated production of CP-odd and charged Higgs bosons
- 3:00 – 3:18 James Wells (Michigan)
Implications of supersymmetry breaking without singlets

Session 1B

Thursday, June 5, 4:00-5:20 p.m.

[Pima]

Chair: C.-P. Yuan

- 4:00 – 4:18 Toshifumi Yamashita (Kyoto)
Gauge coupling unification in GUT with anomalous $U(1)$ symmetry
- 4:20 – 4:38 Michael Berger (Indiana)
Spacetime symmetry violation
- 4:40 – 4:58 Shrihari Gopalakrishna (Michigan State)
B-physics signature of a SUSY $U(2)$ flavor model
- 5:00 – 5:18 Tianjin Li (IAS Princeton)
*Electroweak baryogenesis in the
 $SUSY SU(3) \times SU(2) \times U(1) \times U(1)'$ model*

Session 1C

Friday, June 6, 3:30 to 4:50 p.m.

[Pima]

Chair: James Wells

- 3:30 – 3:48 Andreas Birkedal-Hansen (UC Berkeley)
Relaxing the upper bound on the lightest SUSY Higgs
- 3:50 – 4:08 Shufang Su (Caltech)
The lightest Higgs boson of $mSUGRA$, $mGMSB$ and $mAMSB$ at present and future colliders
- 4:10 – 4:28 Ting Wang (Michigan)
Phenomenology of possible light Higgs bosons
- 4:30 – 4:48 Aaron Pierce (SLAC)
Atmospheric neutrinos can make beauty strange

Session 1D

Saturday, June 7, 1:30 to 2:50 p.m.

[Pima]

Chair: Michael Berger

- 1:30 – 1:48 Yudi Santoso (Minnesota)
Scalar mass non-universality in the MSSM
- 1:50 – 2:08 Otto Kong (Nat'l Central University, Taiwan)
Higgs sector contributions to Δa_μ and constraints on two-Higgs-doublet model with and without SUSY
- 2:10 – 2:28 Brandon Murakami (Argonne)
Ancillary abelian symmetry solution to the AMSB slepton problem
- 2:30 – 2:48 Areshkrishna Datta (Florida)
MSSM Higgs bosons from SUSY cascades at the LHC

Session 1E

Monday, June 9, 4:00 to 5:40 p.m.

[Pima]

Chair: Shufang Su

- 4:00 – 4:18 Bob McElrath (Wisconsin)
Phenomenology of an NMSSM without domain walls
- 4:20 – 4:38 Graham Kribs (Wisconsin)
Rationalizing right-handed neutrinos
- 4:40 – 4:58 Ian Jack (Liverpool)
Yukawa textures and anomaly-mediated SUSY breaking
- 5:00 – 5:18 Kazuhiro Tobe (Michigan)
Revisiting top-bottom-tau Yukawa unification in supersymmetric grand unified theories
- 5:20 – 5:38 Radovan Dermisek (UC Davis)
Unification of couplings and proton decay in SUSY GUTs

Session 1F

Monday, June 9, 4:00 to 5:20 p.m.

[Canyon C]

Chair: James Wells

- 4:00 – 4:18 Haruhiko Terao (Kanazawa University)
Exact S_3 symmetry solving the SUSY flavor problem
- 4:20 – 4:38 Oliver Brein (MPI, Munich)
Production of neutral Higgs jet in the framework of the MSSM
- 4:40 – 4:58 Yoshiaki Umeda (RWTH-Aachen)
One-loop contributions of charginos and neutralinos to W -pair production in e^+e^- collisions
- 5:00 – 5:18 Eri Asakawa (KEK)
Probing complex phase of the photon-photon-Higgs vertex at photon colliders

Session 1G

Tuesday, June 10, 8:30 to 9:30 a.m.

[Pima]

Chair: Kazuhiro Tobe

- 8:30 – 8:48 Haibin Wang (Michigan)
Analysis on the CP asymmetry in $B_d \rightarrow \phi K_S$ decay
- 8:50 – 9:08 Jae-hyeon Park (KAIST)
Nonuniversal squark mass and $B_d \rightarrow \phi K_S$ CP asymmetries
- 9:10 – 9:28 Vassilis Spanos (Minnesota)
Probing patterns of supersymmetry breaking

Session 1H

Tuesday, June 10, 10:00 to 11:40 a.m.

[Pima]

Chair: Stephen Martin

- 10:00 – 10:18 Kai Wang (Oklahoma State)
Stabilizing the axion in SUSY gauge theories
- 10:20 – 10:38 Javier Ferrandis (Hawaii)
Mass predictions based on a supersymmetric $SU(5)$ fixed point
- 10:40 – 10:58 Ilia Gogoladze (Oklahoma State)
R-parity μ -term and fermion mass hierarchy from discrete gauge symmetry
- 11:00 – 11:18 Alan Barr (Cambridge)
Discovering AMSB at the LHC
- 11:20 – 11:38 Marc Thormeier (UC Berkeley)
Supersymmetric Froggatt-Nielsen models with baryon- and lepton-number violation

Session 2: Formal Aspects of SUSY Field Theories

Convenor: Erich Poppitz (Toronto)

Session 2A

Thursday, June 5, 4:00 to 5:10 p.m.

[Canyon C]

Chair: Tonnis ter Veldhuis

- 4:00 – 4:20 Stephen Pinsky (Ohio State)
Simulating super Yang-Mills theories
- 4:25 – 4:45 Erich Poppitz (Toronto)
Deconstructing KK monopoles
- 4:50 – 5:10 Gregory Braun (Cincinnati)
Higher-derivative terms in harmonic superspace

Session 2B

Saturday, June 7, 1:30 to 3:00 p.m.

[Canyon C]

Chair: Erich Poppitz

- 1:30 – 1:45 Masato Arai (Academy of Sciences, Prague)
Wall solution with weak gravity limit in five-dimensional supergravity
- 1:50 – 2:05 Tonnis ter Veldhuis (Minnesota)
Brane dynamics from non-linear realizations
- 2:10 – 2:25 Muneto Nitta (Purdue)
Domain walls in massive hyper-Kähler sigma models
- 2:30 – 2:45 Jaime Besprsovany (UNAM, Mexico)
Standard-Model coupling constants from compositeness: Comparison with supersymmetric models

Session 3: Experimental Searches, Bounds, and Constraints

Convenors: John Conway (Rutgers), JoAnne Hewett (SLAC), Tom Junk (Illinois)

Session 3A B-Factory Implications for SUSY

Thursday, June 5, 2:00 to 3:30 p.m.

[Canyon C]

Chair: Tom Junk

- 2:00 – 2:17 Dennis Dujmic (SLAC)
Search for effects beyond the Standard Model CP asymmetry measurements at BaBar
- 2:18 – 2:35 Koji Hara (Osaka)
Time-dependent CP-violating asymmetries in b - s q decays at Belle
- 2:36 – 2:53 Steve Playfer (Edinburgh)
Radiative penguins at BaBar
- 2:54 – 3:11 Masako Iwasaki (Tokyo)
Measurement of the electroweak penguin process $B \rightarrow X_{sl^+l^-}$ at Belle
- 3:12 – 3:29 Arnold Pompos (Purdue)
Search for SUSY in CDF

Session 3B Higgs Searches

Saturday, June 7, 1:30 to 3:00 p.m.

[Canyons A+B]

Chair: Tom Junk

- 1:30 – 1:47 Gabriella Pasztor (CERN)
Searches for Higgs bosons at LEP
- 1:48 – 2:05 Andre Holzner (ETH Zurich)
Searches for exotic Higgs bosons at LEP
- 2:06 – 2:23 Chris Neu (Ohio State)
Search for the Higgs boson in CDF
- 2:24 – 2:41 Tim Christiansen (Munich)
Search for GMSB SUSY in $D0$
- 2:42 – 2:59 Sungwon Lee (Texas A&M)
Search for SUSY with photons in CDF

Session 3C

Future Prospects

Tuesday, June 10, 8:30 to 9:30 a.m.

[Canyon C]

Chair: JoAnne Hewett

- 8:30 – 8:49 Andre Sopczak (Lancaster)
Exploring supersymmetry at a linear collider
- 8:50 – 9:09 Shuichi Kunori (Maryland)
SUSY search prospects at CMS
- 9:10 – 9:29 Alan Barr (Cambridge)
SUSY search prospects at ATLAS

Session 3D

Searches for Exotica

Tuesday, June 10, 10:00 to 11:40 a.m.

[Canyons A+B]

Chair: JoAnne Hewett

- 10:00 – 10:16 Silke Duensing (NIKHEF)
Search for SUSY in $D0$
- 10:17 – 10:33 David Hutchcroft (Liverpool)
Search for exotic SUSY at LEP
- 10:34 – 10:50 Marie-Claude Cousinou (CPPM Marseille)
Search for leptoquarks in $D0$
- 10:51 – 11:07 Koji Ikado (Waseda)
Search for the Z' and extra dimensions in CDF
- 11:08 – 11:24 Amber Boehnlein (Fermilab)
Search for extra dimensions in $D0$
- 11:25 – 11:41 Kaoru Hagiwara (KEK)
The SM prediction of muon $g - 2$

Session 4: Neutrinos and Lepton Flavor Violation

Convenors: K.S. Babu (Oklahoma State), André de Gouvêa (Fermilab)

Session 4A

Thursday, June 5, 4:00 to 5:40 p.m.

[Canyons A+B]

Chair: Christopher Kolda

- 4:00 – 4:20 Alexander Friedland (LANL)
On the MSW effect of the neutrino background
- 4:20 – 4:40 K.S. Babu (Oklahoma State)
Symmetries of the neutrino mass matrix
- 4:40 – 5:00 Cecilia Lunardini (IAS Princeton)
Physics of supernova neutrinos
- 5:00 – 5:20 Irina Mocioiu (Arizona)
Tracking very high-energy tau neutrinos from cosmological sources
- 5:20 – 5:40 Tomas Blazek (Southampton)
*Best-fit predictions for flavor-violating processes in MSSM
constrained by unification*

Session 4B

Monday, June 9, 4:00 to 5:40 p.m.

[Canyons A+B]

Chair: Alex Friedland

- 4:00 – 4:20 Nobuchika Okada (KEK)
*Lepton flavor violating processes and muon $g - 2$ in minimal
SUSY $SO(10)$ models*
- 4:20 – 4:40 Yasuhiro Shimizu (Nagoya)
*GUT relation in neutrino-induced flavor physics
in SUSY $SU(5)$ GUT*
- 4:40 – 5:00 Christopher Kolda (Notre Dame)
Higgs-mediated lepton flavor violation
- 5:00 – 5:20 Durmush Demir (Minnesota)
Supersymmetric flavor violation: Rare processes and Higgs decays
- 5:20 – 5:40 Ryuichiro Kitano (IAS Princeton)
*Detailed calculation of lepton flavor violating muon-electron
conversion for various nuclei*

Session 5: String Phenomenology and the Brane World

Convenors: Tony Gherghetta (Minnesota), Gary Shiu (Wisconsin)

Session 5A Brane World and Extra Dimensions

Thursday, June 5, 2:00 to 3:30 p.m.

[Madera]

Chair: TBA

- 2:00 – 2:20 Sabine Hossenfelder (ITP, Frankfurt)
Trans-Planck signatures in large extra dimensions
- 2:22 – 2:42 Christos Kokorelis (UAM, Madrid)
Beyond the SM: D-brane model building from intersecting brane worlds
- 2:44 – 3:04 Bumseok Kyae (Delaware)
Brane gravity, massless bulk scalar, and self-tuning solution to the cosmological constant problem
- 3:06 – 3:26 Yukihiro Mimura (Regina)
Gauge-Higgs unification in left-right model

Session 5B Extra Dimensions I

Thursday, June 5, 4:00 to 5:40 p.m.

[Madera]

Chair: TBA

- 4:00 – 4:18 Gustavo Burdman (LBNL)
Gauge-Higgs unification in higher dimensions
- 4:20 – 4:38 Zackaria Chacko (Berkeley)
Extra dimensions at the weak scale and deviations from Newtonian gravity
- 4:40 – 4:58 Hong-Jian He (UT Austin)
Unitarity in higher dimensions and gauge unifications
- 5:00 – 5:18 Hyung Do Kim (Ohio State)
Unification in 5D SO(10)
- 5:20 – 5:38 Satya Nandi (Oklahoma State)
Unity of elementary particles and forces in higher dimensions

Session 5C

Extra Dimensions II

Friday, June 6, 3:30 to 5:00 p.m.

[Madera]

Chair: TBA

- 3:30 – 3:50 Tony Gherghetta (Minnesota)
The Standard Model partly supersymmetric
- 3:52 – 4:12 Kaustubh Agashe (Hopkins)
Grand unification in RS1, naturally (and without SUSY)
- 4:14 – 4:34 Michele Redi (Hopkins)
Radion in the non-fine-tuned RS model
- 4:36 – 4:56 Manuel Toharia (UC Davis)
The scalar sector in the Randall-Sundrum model

Session 5D

String Phenomenology

Saturday, June 7, 1:30 to 3:00 p.m.

[Madera]

Chair: TBA

- 1:30 – 1:50 Saswat Sarangi (Cornell)
Brane-antibrane potential from open string and closed string channels and some cosmological consequences
- 1:52 – 2:12 Liantao Wang (Wisconsin)
Phenomenology of new non-perturbative states in brane world models
- 2:14 – 2:34 Lisa Everett (CERN)
CP violation in supersymmetric $U(1)'$ models
- 2:36 – 2:56 Brent Nelson (Michigan)
Can string-based models achieve the maximal mixing Higgs scenario?

Session 5E

Little Higgs

Monday, June 9, 4:00 to 5:40 p.m.

[Madera]

Chair: Liantao Wang

- 4:00 – 4:18 Jacob Wacker (Harvard)
Precision electroweak physics and little Higgs models
- 4:20 – 4:38 Thomas Gregoire (Harvard)
SU(6)/Sp(6) Little Higgs and electroweak precision measurements
- 4:40 – 4:58 Spencer Chang (Harvard)
Custodial SU(2) and little Higgs
- 5:00 – 5:18 Heather Logan (Wisconsin)
Phenomenology of little Higgs
- 5:20 – 5:38 Patrick Meade (Cornell)
Electroweak constraints on little Higgs models

Session 5F

New Exotic Physics

Tuesday, June 10, 10:00 to 11:40 a.m.

[Madera]

Chair: Graham Kribs

- 10:00 – 10:22 Nima Arkani-Hamed (Harvard)
Infrared modifications of gravity, and gravity in theory space
- 10:25 – 10:47 Christopher Carone (William and Mary)
Lorentz violation and supersymmetric noncommutative QED
- 10:50 – 11:12 Xavier Calmet (Caltech)
Yang-Mills theories on non-commutative spaces
- 11:15 – 11:37 Aaron Pierce (SLAC)
Testing the little Higgs at the LHC

Session 6: Formal Aspects of String Theory

Convenors: Clifford Johnson (Durham),
Rob Myers (Perimeter), Amanda Peet (Toronto)

Session 6A

Thursday, June 5, 2:00 to 3:30 p.m.

[Canyons A+B]

Chair: R.C. Myers

- 2:00 – 2:16 Asad Naqvi (Pennsylvania)
Rolling tachyons and decaying branes
- 2:18 – 2:34 Sanjaye Ramgoolam (Brown)
Massive IIA string theory and matrix theory
- 2:36 – 2:52 Matthew Kleban (Stanford)
Behind the horizon of the AdS black hole
- 2:54 – 3:10 Axel Krause (Maryland)
de Sitter vacua in strongly coupled heterotic string theory
- 3:12 – 3:28 Karl Landsteiner (IFT, Madrid)
Geometric regularization and dual conifold transitions

Session 6B

Tuesday, June 10, 8:30 to 9:30 a.m.

[Canyons A+B]

Chair: Sanjaye Ramgoolam

- 8:30 – 8:48 Melanie Becker (Maryland)
*Warped compactifications of the heterotic string, fluxes,
and the moduli space problem in string theory*
- 8:50 – 9:08 Radu Roiban (KITP, Santa Barbara)
Hidden symmetries of the $AdS_5 \times S^5$ superstring
- 9:10 – 9:28 Johanna Erdmenger (Humboldt University, Berlin)
Defect conformal field theories in superspace and AdS/CFT

Session 7: Astrophysical and Cosmological Connections

Convenors: Nemanja Kaloper (UC Davis),
Lloyd Knox (UC Davis), Christopher Kolda (Notre Dame)

Session 7A

Friday, June 6, 3:30 to 5:00 p.m.

[Canyons A+B+C]

Chair: TBA

- 3:30 – 3:48 Michael Nolta (Princeton)
TBA
- 3:50 – 4:12 Daniel Chung (Wisconsin)
Run, spectral index, run
- 4:15 – 4:37 Marco Peloso (CITA, Toronto)
Super-GZK photons from photon-axion mixing
- 4:40 – 4:58 Anupam Mazumdar (McGill)
MSSM and its virtues in generating adiabatic density perturbations

Session 7B

Tuesday, June 10, 8:30 to 9:30 a.m.

[Madera]

Chair: TBA

- 8:30 – 8:48 Hye-Sung Lee (Wisconsin)
Primordial nucleosynthesis constraints on Z' properties
- 8:50 – 9:08 Fumihiro Takayama (UC Irvine)
sWIMPS and the early universe
- 9:10 – 9:28 Thomas Dent (Aristotle University, Thessaloniki)
Varying alpha thresholds and extra dimensions

Conference Stats:
46 plenary talks
111 parallel talks
110 degrees Fahrenheit
but it's a dry heat