



STRING PHENOMENOLOGY

AUGUST 22-26, 2011
MADISON, WISCONSIN USA



Welcome to Madison and the University of Wisconsin

The 10th Annual String Phenomenology Conference will be held at the University of Wisconsin, Madison on August 22nd-26th, 2011.

The goal of String Pheno 2011 is to bring together researchers of diverse subfields in physics and mathematics to present and discuss recent developments in connecting observable particle physics and cosmology with the domain of fundamental theory. The conference includes invited plenary talks as well as two afternoons of parallel sessions (parallel talk submissions can be made here). We particularly welcome and encourage the participation of younger researchers.

String Phenomenology 2011

August 22-26, 2011 The Pyle Center on the University of Wisconsin-Madison Campus

SCHEDULE

Monday, August 22nd

8:00 am	Registration Opens	Pyle Main Lobby
9:00 am	Plenary Session	325/325 Pyle
10:30 am	Coffee Break	
11:00 am	Plenary Session	325/326 Pyle
12:30 pm	Lunch	On your own
2:30 pm	Plenary Session	325/326 Pyle
4:00pm	Refreshment Break	
4:30 pm	Plenary Session	325/326 Pyle
6:30 pm	Reception with cash bar	Pyle Center Rooftop Terrace

Tuesday, August 23rd

8:00 am	Registration Opens	325/326 Pyle
9:00 am	Plenary Session	325/325 Pyle
10:30 am	Coffee Break	
11:00 am	Plenary Session	325/326 Pyle
1:00 pm	Lunch	On your own
3:00 pm	Parallel Session 1-A	325/326
3:00 pm	Parallel Session 1-B	309
4:10 pm	Refreshment Break	
4:45 pm	Parallel Session 2-A	325/326
4:45 pm	Parallel Session 2-B	309
6:30 pm	End	

Wednesday, August 24th

8:00 am	Registration Opens	325/326 Pyle
9:00 am	Plenary Session	325/325 Pyle
10:30 am	Coffee Break	
11:00 am	Plenary Session	325/326 Pyle
12:30 pm	Lunch	On your own
2:30 pm	Parallel Session 1-A	325/326
2:30 pm	Parallel Session 1-B	309
3:50 pm	Refreshment Break	
4:30 pm	Parallel Session 2-A	325/326
4:30 pm	Parallel Session 2-B	309
6:30 pm	End	

String Phenomenology 2011

August 22-26, 2011

The Pyle Center on the University of Wisconsin-Madison Campus

SCHEDULE

Thursday, August 25th

8:00 am	Registration Opens	325/326 Pyle
9:00 am	Plenary Session	325/325 Pyle
10:30 am	Coffee Break	
11:00 am	Plenary Session	325/326 Pyle
12:30 pm	Lunch	On your own
2:30 pm	Plenary Session	325/326 Pyle
4:30 pm	Refreshment Break	
5:00 pm	Plenary Session	325/326 Pyle
6:30 pm	Cash Bar and Reception	Alumni Lounge
7:30 pm	Banquet	Alumni Lounge

Friday, August 26th

8:00 am	Registration Opens	325/326 Pyle
9:00 am	Plenary Session	325/325 Pyle
10:30 am	Coffee Break	
11:00 am	Plenary Session	325/326 Pyle
12:30 pm	End Conference	

All events are held at The Pyle Center, 702 Langdon Street.

Sessions are held in rooms 325, 326, and 309. Check classroom signage for specific session assignment.

Local Organizing Committee: Lisa Everett, Gary Shiu (co-chairs), Heng-Yu Chen, Jiajun Xu

Local Logistics Conference Planners: Patti Thompson, Deborah Curry, Christopher Sholke

International Advisory Committee: I. Antoniadis (CERN), M. Bianchi (Rome), R. Blumenhagen (MPI Munich), M. Cvetič (Penn), K. Dienes (Maryland and Arizona), M. Douglas (Rutgers), E. Dudas (Ecole Polytechnique), Alon Faraggi (Liverpool), D. Gross (KIT), L. Ibanez (Madrid), G. Kane (Michigan), S. Khalil (British U. of Egypt), E. Kiritsis (Crete), P. Langacker (IAS), D. Lüst (LMU and MPI, Munich), J. Louis (DESY), B. Ovrut (Penn), F. Quevedo (Cambridge and ICTP), S. Raby (Ohio State), W. Taylor (MIT), H. Verlinde (Princeton), E. Witten (IAS)

Partial conference support is provided by Cottrell Scholar Award, Research Corporation, The U.S. Department of Energy, and The National Science Foundation.

String Phenomenology 2011

August 22-26, 2011 The Pyle Center on the University of Wisconsin-Madison Campus

PLENARY SESSIONS

Monday, August 22

9:00-9:30	Verlinde	
9:30-10:00	Dienes	"Dynamical Dark Matter: A New Framework for Dark-Matter Physics"
10:00-10:30	Faraggi	"Exophobia, Leptophobia, and Other Manias in Heterotic String Compactifications"
11:00-11:30	Antoniadis	"Mass Hierarchies in String Theory and Quantum Gravity in Accelerators"
11:30-12:00	Conlon	"Scattering, Sequestering and Sort-Of Sequestering of Local Moduli in Local Models"
12:00-12:30	Donagi	
2:30-3:00	Langacker	"New Physics from Type IIA Quivers"
3:00-3:30	Kyae	"Weak Mixing Angle and Proton Stability in F-theory GUTs"
3:30-4:00	Marsano	"U(1)'s and Fluxes in F-theory GUTs"
4:30-5:00	Marchesano	"RR Photons"
5:00-5:30	Grimm	"F-theory Effective Actions in 4 and 6 Dimensions"
5:30-6:00	Green	"Signatures of Supersymmetry from the Early Universe"
6:00-6:30	Wrase	"Towards classical dS vacua"

Tuesday, August 23

9:00-9:30	Ovrut	
9:30-10:00	Raby	"Problems with the MSSM: mu and Proton Decay"
10:00-10:30	Wang	"Mitigating the Moduli Messes in Low-Scale SUSY Breaking"
11:00-11:30	Park	"Abelian Gauge Symmetry in Six-dimensional Supergravity"
11:30-12:00	Lu	"Robust EWSB in Compactified String/M-theory"
12:00-12:30	McGuirk	"Chiral matter wavefunctions in warped compactifications"
12:30-1:00	Halverson	"Instantons in F-theory from Heterotic Duality"

Wednesday, August 24

9:00-9:30	Cvetic	"Non-Perturbative Effects in Type II and F-Theory"
9:30-10:00	Garcia-Etxebarria	"Global embeddings for branes at singularities"
10:00-10:30	Weigand	
11:00-11:30	W. Taylor	"Constraints on supergravity theories in 6D and 4D"
11:30-12:00	Watson	"UV Sensitivity of Dark Matter"
12:00-12:30	Kane	"Generic Testable String Theory Predictions for Superpartners, LHC, Dark Matter, and Cosmology"

Thursday, August 25

9:00-9:30	T. Taylor	"Accelerator Signals of Low Mass Strings"
9:30-10:00	Anderson	
10:00-10:30	Gray	
11:00-11:30	Dudas	
11:30-12:00	de Alwis	
12:00-12:30	Partouche	"Non-singular Superstring Cosmologies via Thermal Duality"
2:30-3:00	McAllister	
3:00-3:30	Geshnizjani	
3:30-4:00	Anchordoqui	"U(3) x Sp(1) x U(1) x U(1) omen at hadron colliders"
4:00-4:30	Westphal	"A sufficient condition for IIB/F-theory dS vacua"
5:00-5:30	Camara	
5:30-6:00	Heckman	
6:00-6:30	Watari	

Friday, August 26

9:00-9:30	Dine	"Studies in Small Field Inflation"
9:30-10:00	Massai	
11:00-11:30	Nilles	
11:30-12:00	Collinucci	"G-flux in F-theory and algebraic cycles"
12:00-12:30	Quevedo	

PARALLEL SESSIONS

Tuesday, August 23

3:00-3:20	Parallel Session 1-A Mehta	(325/326 Pyle) "Light Z' Inspired from String Derived Models"
3:20-3:50	Choi	"Models from F-theory/ Heterotic M-theory"
3:50-4:10	Witkowski	"Yukawa Couplings with a Twist"
	Parallel Session 1-B Spinner	(309 Pyle) "The Fate of R-Parity"
3:00-3:20	Z. Liu	"Color Resonances at LHC"
3:20-3:50	Schmitthener	"R-Parity Violation: Bounds and LHC Implications"
3:50-4:10	Parallel Session 2-A Anandakrishnan	(325/326 Pyle) "Gauge Coupling Unification in Heterotic String Models with Gauge Mediated SUSY Breaking"
4:45-5:05	Plauschinn	"Non-geometric Fluxes, Asymmetric Strings and Nonassociative Geometry"
5:05-5:25	Soler	"Discrete Gauge Symmetries in D-brane Models"
5:25-5:45	Savelli	"Effective 4d Physics of M-theory on CY fourfold"
5:45-6:05		
6:05-6:25	Parallel Session 2-B Feng	(309 Pyle) "Scattering Amplitudes Involving Massive String States"
4:45-5:05	Rojas	"Open String Regge Trajectories and Large N QCD"
5:05-5:25	Luedeling	"The Potential Fate of Local Model Building"
5:25-5:45	Koroteev	"Combined Sakharov-Kaluza Klein Baryogenesis and a Theoretical Value for G"
5:45-6:05		

Wednesday, August 24

2:30-2:50	Parallel Session 1-A Halter	(325/326 Pyle) "Matter Inflation in Heterotic String Theory"
2:50-3:10	Sumitomo	"Comments on Stable dS vacua and No-go theorem"
3:10-3:30	Cicoli	"Testing anisotropic string compactifications in the lab"
3:30-3:50	L. Liu	"TBA (concerning moduli stabilization in cosmology)"
	Parallel Session 1-B Long	(309 Pyle) "Probing Cosmological Fine-Tuning with Phase Transitions"
2:30-2:50	Yoo	"Non-Gaussianity Probes of Heavy Boson Isocurvature"
2:50-3:10	Zhou	"Inflationary Cosmological Probes of Stable Fermions"
3:10-3:30	Thomas	"Dynamical Dark Matter: II An Explicit Example"
3:30-3:50	Parallel Session 2-A Marsh	(325/326 Pyle) "Towards constraining Affleck-Dine baryogenesis"
4:30-4:50	Gandhi	"Perturbing Flux Compactification"
4:50-5:10	Heidenrich	"Towards a local model of Kahler moduli stabilization"
5:10-5:30	Givens	"Physical Vacua in IIB Compactifications with a Single Kahler Modulus"
5:30-5:50	Parallel Session 2-B Kuwakino	(309 Pyle) "Heterotic Asymmetric Orbifold and E6 GUT Model"
4:30-4:50	Walliser	"Computational tools for constructing smooth CY hypersurfaces and applications to string model building"
4:50-5:10	Blaszczyk	"Gauged linear sigma models for toroidal orbifolds and their blowups"
5:10-5:30	Ruehle	"Green-Schwarz Mechanism in Heterotic (2,0) Gauged Linear Sigma Models: Torsion and NS5 Branes"
5:30-5:50		

String Phenomenology 2011

August 22-26, 2011 The Pyle Center on the University of Wisconsin-Madison Campus

RECEPTIONS AT THE PYLE CENTER

Welcome Reception - Monday, August 22, 2011

Reception with Cash Bar: 6:30 pm - 9:00 pm
The Pyle Center Rooftop Terrace Overlooking Lake Mendota
(Inclement weather location in The Pyle Center AT&T Lounge)



Banquet Dinner - Thursday, August 25, 2011

Reception with Cash Bar: 6:30 pm - 7:30 pm
Dinner (Bring Dinner Ticket): 7:30 pm - 9:00 pm
The Pyle Center Alumni Lounge



String Phenomenology 2011

August 22-26, 2011 The Pyle Center on the University of Wisconsin-Madison Campus

THINGS TO DO IN MADISON

Situated on an isthmus between Lakes Mendota and Monona, Madison is a charming and picturesque city with lots to offer - five lakes, 200 parks, miles of bicycle and foot paths, one of the loveliest university campuses in the country, great dining and entertainment, and a stimulating cultural and recreational environment. Here are a few highlights.

State Street links the University of Wisconsin campus with the Capitol Square. A walk up State Street offers a wide variety of ethnic restaurants, coffeehouses, and shops. The Cesar Pelli designed Overture Center for the Arts, located on the 200-block of State Street, was a \$205,000,000 gift to the city from Madison businessman Jerry Frautschi. The Madison Museum of Contemporary Art is located in the Overture Center for the Arts. The Wisconsin Historical Museum, the Wisconsin Veterans Museum, and the Madison Children's Museum are all located on the corner where State Street meets the Capitol Square.

The Saturday Morning **Dane County Farmers' Market** is held May through October, around the Capitol Square. Hours are 6:00 am - 2:00 pm. The smaller Wednesday Farmers' Market is located on Martin Luther King Jr. Blvd, located on the southeast side of the Capitol (in front of the Monona Terrace), and is open Wednesdays from 8:30 am - 2:00 pm, May through October.

Bike Rentals are available one block east of Monona Terrace along the lower level lakefront bike path at Machinery Row Bicycles or at Yellow Jersey on State Street. Rent a bike, helmet and lock, and be sure to grab a cycling map on your way out the door.

Take a **guided tour** from the Madison Trust for Historic Preservation. Popular stops include the Wisconsin State Capitol, the Cesar Pelli-designed Overture Center for the Performing Arts, Frank Lloyd Wright's First Unitarian Society, the University of Wisconsin's extraordinary lakeside campus, and Mansion Hill. Group and private tours available.

Tours of the **Wisconsin State Capitol** are free and open to the public. Tours start at the information desk and are offered hourly, except at noon, Monday - Friday: 9:00 am - 4:00 pm, Saturdays 9:00 am - 3:00 pm, and Sundays at 1:00 pm - 3:00 pm.

The **University of Wisconsin** is one of the finest universities in the United States and one of the largest with over 40,000 students. Here are a few ideas for exploring campus and the lakeshore.

Take a walk, bicycle ride, or run along the shore of Lake Mendota on the **Howard Temin Lakeshore Path**. You can access the path at the Memorial Union on Langdon Street and continue west for 1.5 miles where you will reach the entrance to Picnic Point. Picnic Point is a peninsula and nature preserve for foot traffic only. You can walk or run out to the end of the point (.75 miles) for great views of Madison and campus.

The **Memorial Union** at the corner of Park and Langdon Streets is a legendary campus hangout. The Memorial Union Terrace on Lake Mendota offers lovely views, beautiful sunsets, and great people watching. The Union Terrace is a great place to enjoy a cold local beer or The University of Wisconsin's famous Babcock Dairy Ice Cream. You can rent a canoe at the Memorial Union Hooper's Boathouse, located on the lakeshore just west of the Union Terrace.

Take a free **Bus Ride** through campus (approximately 30 minutes). Bus Route 80 stops on the Park Street side of the Memorial Union every 10 minutes.

String Phenomenology 2011

August 22-26, 2011 **The Pyle Center on the University of Wisconsin-Madison Campus**

CAMPUS AREA INFORMATION

Internet Access:

There are computer kiosks with internet access on the each floor of The Pyle Center. There is wireless access available with the password provided with your registration materials.

Local Taxi Services:

Badger Cab 608-256-5566

Union Cab 608-242-2000

Madison Taxi 608-255-8294

Pharmacy and Drug Store:

Walgreens

311 East Campus Mall – (608) 251-0042, Full Prescription Service at this location

Walgreens

676 State Street, NO PRESCRIPTION SERVICE at this location

Local Immediate Care (non-emergency) Clinics:

Group Health Capitol Clinic Urgent Care

– 675 W. Washington Avenue (at Regent Street) – Phone 608-257-9700

Dean Urgent Care

– 752 N. High Point Road – Phone 608-250-1525

– 1821 S. Stoughton Road – Phone 608-250-1525

UW Health Immediate Care

– 7102 Mineral Point Road – Phone 608-828-7603

– 4122 East Towne Blvd. – Phone 608-242-6855

Local Hospitals:

Meriter Hospital

202 South Park Street

608-267-6000 (general)

608-267-6206 (24 hour emergency)

UW Hospital and Clinics

600 Highland Avenue

608-263-6400 (general)

608-262-2398 (24 hour emergency)

ATM's: There are three no-fee ATM's near The Pyle Center: at the Memorial Union (800 Langdon Street), outside the UW Credit Union (662 State Street), and outside the University Bookstore (711 State Street).

United States Post Office: The closest U.S. Post office to The Pyle Center is located at 441 N. Lake Street, just south of the intersection of State and Lake. Open M-F 10:00 am - 6:00 pm and Sat. 11:30 am - 4:00 pm.

Sport/Recreational Facilities:

The University of Wisconsin-Madison campus welcomes visitors to use their recreational facilities. To use the facilities you must be 18 years of age, show your conference name tag, and pay a guest fee of \$5.00. Stop by front desk for directions to the nearest sports complex.

String Phenomenology 2011

August 22-26, 2011

The Pyle Center on the University of Wisconsin-Madison Campus