

Galapagos World Summit on “Physics Beyond the Standard Model”

27 June 2006

When: 22 (Thursday), 23, 24 and 25, June 2006. Unless you are taking a tour, please arrive at Quito by June 20. The flight to Galapagos is on the 21st. The flight from Galapagos to Quito is on June 26 PM.

Where: Galapagos Institute for the Arts and Sciences (GAIAS), Universidad San Francisco de Quito (USFQ), ¹ San Cristobal island, Galapagos.

Purpose: We hope the Galapagos meeting will be to Particle Physics what the Copenhagen meeting was to Quantum Mechanics. A new paradigm lies beyond the Standard Model. The clues hide in experiment (high p_T searches, precision measurements, rare decays, neutrinos, cosmology, astrophysics, cosmic rays) and in a multitude of theoretical ideas. Let us advance the solution of the puzzle!

The success of the Galapagos World Summit on Physics Beyond the Standard Model will be judged by the QUALITY OF ORIGINAL IDEAS coming from this meeting. We hope to learn the latest experimental results and discuss our new creative and original theoretical ideas anchored on phenomenology. I hope we can pin down the viable extensions to the Standard Model and understand their experimental consequences. That is our goal.

This meeting is not a school: it is a workshop. We encourage all attendees, speakers, graduate students and participants, to play an ACTIVE role at the meeting. Please bring your ideas! Speakers are encouraged to contribute a chapter to the book (described below). Graduate students and participants may also contribute to the book (with prior coordination with the editor).

¹USFQ participates in the D \emptyset experiment at the Fermilab Tevatron collider.

If you wish, you may display a poster. We will have plenty of time for discussions.

Let us all make this the most creative workshop!

Format: Broad scope 45 minute presentations followed by 15 minute discussions.

Participants: 24 invited speakers, 24 graduate students, plus 100 theoretical and experimental particle physicists (by invitation only).

Organizer: Carlos Montufar (carlosm@usfq.edu.ec), Universidad San Francisco de Quito, Ecuador.

Web site: <http://www.usfq.edu.ec/> → Galapagos World Summit on Physics Beyond the Standard Model.

Proceedings: To leave a lasting legacy of this meeting, Universidad San Francisco de Quito will publish a multi-author book which will also be posted to our web site <http://www.usfq.edu.ec> → Galapagos → Summit Book. Editor: Bruce Hoeneisen. Articles from speakers and from participants are welcome. We will also post all presentations (in pdf format) on <http://www.usfq.edu.ec> → Galapagos → Summit Talks.

Please send your chapter of the book in final form (it will not be edited), in latex format with figures in eps format to bruce1@fnal.gov as a tar attachment, by September 1, 2006. The format will be `documentclass[11pt,letterpaper,twoside]book`. By submitting a chapter, authors are granting permission to Universidad San Francisco de Quito to include it in the book and publish it.

Poster session: There will be a poster session: please feel free to contribute.

Galapagos: The Galapagos Islands were declared Natural World Heritage by UNESCO in 1978. The GAIAS Institute is on the beach within walking distance from where Charles Darwin first landed. The animals and plants of the islands inspired his theory of evolution. These are remote islands. The summit will fill all hotels on San Cristobal island so we must book reservations well in advance. Due to the perfect climate of Galapagos the hotels have no heating, air conditioning or hot water.

Session	Theory/experiment	Experiment/theory
Thursday, June 22:		
Rare decays/precision measurements Baryon asymmetry/CP-Violation Beyond the EW scale Neutrinos	Andrzej Buras Roberto Peccei Chris Quigg Hisakazu Minakata	Ulrich Nierste Patricia Burchat Guido Altarelli Gabriela Barenboim
Friday, June 23:		
Tevatron/Large Hadron Collider Cosmology/Dark Matter Cosmic rays/Neutrino experiments Grand Unified Theories/EW at LHC	Young-Kee Kim Rocky Kolb Alvaro De Rújula Stuart Raby	Pierre Petroff Gilles Gerbier Stan Wojcicki Riccardo Barbieri
Saturday, June 24: tour Phenomenology beyond SM	Paul H. Frampton	
Sunday, June 25:		
Supersymmetry/Top quark Gravity, extra-D/WMAP SUSY search/New limits on NP Axions/Future accelerators	Gordon Kane Lisa Randall Jonathan Ellis Frank Wilczek	John Womersley Charles Bennett Bruce Hoeneisen Leon Lederman

Table 1: Agenda

Session	Chair person
Thursday, June 22:	
Rare decays/precision measurements Baryon asymmetry/CP-Violation Beyond the EW scale Neutrinos	Giulia Ricciardi Carlos Marín Daria Zieminska Ernest Ma
Friday, June 23:	
Tevatron/Large Hadron Collider Cosmology/Dark Matter Cosmic rays/Neutrino experiments Grand Unified Theories/EW at LHC	Boaz Klima Andrzej Ziemiński Maury Goodman Max Klein
Saturday, June 24:	
Phenomenology beyond SM	Barbara De Lotto
Sunday, June 25:	
Supersymmetry/Top quark Gravity, extra-D/WMAP SUSY search/New limits on NP Axions/Future accelerators	Tom Ferbel Antonio Dobado Guennadi Borissov Kunitaka Kondo

Table 2: Chair persons.