

CIPANP 2012 Fourth Bulletin: 1 February 2012

**11th Conference on the Intersections of Particle and Nuclear Physics (CIPANP 2012),
Renaissance Vinoy Resort and Golf Club, St. Petersburg, FL, May 29 – June 3, 2012**

The objectives of the CIPANP Conferences are to encourage communications among experimental and theoretical elementary particle physicists, nuclear physicists, astroparticle physicists, astronuclear physicists, and cosmologists covering a wide range of topics of current interest.

CIPANP will include plenary, parallel and poster sessions. The plenary session talks and invited parallel session talks will be of 30 minutes duration, including 5 minutes for discussion. Review talks by the Convenors on the parallel session contents will be 25 minutes long, again including 5 minutes for discussion. Other selected parallel session talks will be of 20 minutes duration, including 3 minutes for discussion.

Please see the CIPANP 2012 conference website at <http://cipanp2012.triumf.ca> for full details.

Scientific Program

Topics and Plenary Session Speakers:

- **High Energy Frontier**

Results from the First Two Years of Operation of the LHC: the ATLAS Experiment

Beate Heinemann [*University of California, Berkeley*]

Results from the First Two Years of Operation of the LHC: the CMS Experiment

Darin E. Acosta [*University of Florida*]

- **Low Energy Precision Frontier**

Rare Decays and Symmetries

Magnus Wolke [*Uppsala University*]

Search for Lepton Flavour Violations

Yoshitake Kuno [*Osaka University*]

- **Neutrino Masses and Neutrino Mixing**

Neutrino Oscillation Physics

Ornella Palamara [*Laboratori Nazionale del Gran Sasso*]

Neutrino Mass Measurements and the Nature of the Neutrino

Thierry Lasserre [*CEA-Saclay*]

- **Electroweak Tests of the Standard Model**

Electroweak Tests of the Standard Model

Jens Erler [*UNAM*]

EDM Searches

Klaus Kirch [*PSI*]

- **Cosmic Frontier**
 - The Cosmic Frontier**
Scott Dodelson *[University of Chicago]*
 - Searching for Gravitational Waves**
Gabriela González *[Louisiana State University]*
- **Dark Matter and Dark Energy**
 - Dark Forces and the GeV Frontier**
Natalia Toro *[Perimeter Institute]*
 - Dark Matter Signatures and Limits**
Reina Maruyama *[University of Wisconsin]*
- **Particle and Nuclear Astrophysics**
 - Big Bang Nucleosynthesis**
Keith Olive *[University of Minnesota]*
 - Particle and Nuclear Astrophysics**
Hendrik Schatz *[Michigan State University]*
 - Neutrino Flavour Transformation and Supernovae**
Maria Cristina Volpe *[Institut de Physique Nucléaire d'Orsay]*
- **Heavy Flavour and the CKM Matrix**
 - Present and Future of Heavy Flavour Physics: Experimental Perspectives**
Stephane T'Jampens *[CNRS/IN2P3/LAPP]*
 - Heavy Flavour and the CKM Matrix (a Theoretical Overview)**
Enrico Lunghi *[Indiana University]*
- **QCD, Hadron Spectroscopy and Exotics**
 - Understanding the Baryon and Meson Spectra**
Michael R. Pennington *[Jefferson Laboratory]*
 - Lattice QCD and the Physics of Hadrons (Structure/Spectroscopy)**
Constantia Alexandrou *[University of Cyprus]*
- **Hadronic Physics and Spin**
 - Where is the Spin of the Nucleon?**
Zein-Eddine Meziani *[Temple University]*
 - Disentangling the EMC Effects**
Eliazer Piassetzky *[Tel Aviv University]*
- **Nucleon Structure**
 - Asymmetric Parton Distributions in the Nucleon**
Daniel Boer *[KVI Groningen]*
 - Nucleon Form Factors**
John Arrington *[ANL]*

- **Nuclear Structure**
 - Understanding Nuclei from First Principles
Petr Navratil *[TRIUMF]*
 - Nuclei at the Limits of Stability
Alexandra Gade *[Michigan State University]*
 - The Quest for the Super-Heavy Elements
Yuri Oganessian *[Joint Institute for Nuclear Research – Dubna]*
- **Quark Matter and High Energy Heavy-Ion Collisions**
 - High Energy Heavy Ion Physics
Jamie Nagle *[University of Colorado]*
- **New Facilities and their Instrumentation**
 - The Physics with Electron-Ion Colliders
Abhay Deshpande *[SUNY – Stony Brook]*
- **Closing Talk**
 - Vision
Richard G. Milner *[Massachusetts Institute of Technology]*
- **Public Lecture**
 - Energy and the Future (a Worldwide Perspective)
Ernest J. Moniz *[Massachusetts Institute of Technology]*

The Convenors for the 14 sets of Parallel Sessions corresponding to the above topics are:

- **High Energy Frontier**
 - Convenors: Oliver Stelzer-Chilton *[TRIUMF]*
Roni Harnik *[FNAL]*
- **Low Energy Precision Frontier**
 - Convenors: Chen-Yu Liu *[Indiana University]*
Vincenzo Cirigliano *[LANL]*
- **Neutrino Masses and Neutrino Mixing**
 - Convenors: Nikolai Tolich *[University of Washington]*
Carlo Giunti *[INFN-Torino]*
- **Electroweak Tests of the Standard Model**
 - Convenors: Joao Guimaraes da Costa *[Harvard University]*
Ross Young *[University of Adelaide]*

- **Cosmic Frontier**

Convenors: William C. Wester *[FNAL]*
Nicole F. Bell *[Melbourne University]*

- **Dark Matter and Dark Energy**

Convenors: Jocelyn Monroe *[MIT]*
Neal Weiner *[New York University]*

- **Particle and Nuclear Astrophysics**

Convenors: Juan Estrada *[FNAL]*
Gail McLaughlin *[North Carolina State University]*

- **Heavy Flavour and the CKM Matrix**

Convenors: Steven Blusk *[Syracuse University]*
Andreas S. Kronfeld *[FNAL]*

- **QCD, Hadron Spectroscopy and Exotics**

Convenors: Annalisa D'Angelo *[INFN-Roma 'Tor Vergata']*
Jozef Dudek *[Old Dominion University]*

- **Hadronic Physics and Spin**

Convenors: Kawtar Hafidi *[ANL]*
Andreas Metz *[Temple University]*

- **Nucleon Structure**

Convenors: Michel Guidal *[Institut de Physique Nucléaire d'Orsay]*
Vladimir Pascalutsa *[Universität Mainz]*

- **Nuclear Structure**

Convenors: Rituparna Kanungo *[Saint Mary's University]*
Achim Schwenk *[TU Darmstadt]*

- **Quark Matter and High Energy Heavy Ion Collisions**

Convenors: Christine Nattrass *[University of Tennessee-Knoxville]*
William Horowitz *[University of Capetown]*

- **New Facilities and their Instrumentation**

Convenors: Mike Syphers *[NSCL-MSU]*
Eugene Chudakov *[Jefferson Laboratory]*

Conference Program

	Monday 28 May 2012	Tuesday 29 May 2012	Wednesday 30 May 2012	Thursday 31 May 2012	Friday 1 June 2012	Saturday 2 June 2012	Sunday 3 June 2012
08:00		Parallel Sessions 1	Parallel Sessions 3	Parallel Sessions 5	Parallel Sessions 6	Parallel Sessions 8	Parallel Sessions 10
10:00		Refreshments	Refreshments	Refreshments	Refreshments	Refreshments	Refreshments
10:30		Plenary Session 1	Plenary Session 3	Plenary Session 5	Plenary Session 6	Plenary Session 8	Plenary Session 10
12:30		Lunch	Lunch	Lunch	Lunch	Lunch	
14:00		Plenary Session 2	Plenary Session 4	Excursions	Plenary Session 7	Plenary Session 9	
16:00	Registration	Refreshments	Refreshments		Refreshments	Refreshments	
16:30		Parallel Sessions 2	Parallel Sessions 4		Parallel Sessions 7	Parallel Sessions 9	
18:30							
19:00		Reception			Poster Session	Conference Banquet	
20:00		Public Lecture					
22:00							

Proceedings

As was done for the previous CIPANP Conferences, arrangements have been made with the American Institute of Physics to publish the CIPANP 2012 Proceedings. Authors are requested to submit the written versions of their talks prior to the deadline of 3 August 2012.

Abstract Submission (Note the 24 February 2012 deadline)

Information about submitting a contributed paper/poster abstract (deadline 24 February 2012) is available at <http://cipanp2012.triumf.ca>. CIPANP 2012 abstract submission is now open. All abstracts will be reviewed by the two Convenors of the particular topic. Contributors will be informed whether their contributions have been selected for oral presentation in the parallel sessions or accepted as posters by 31 March 2012. Invited plenary session talks and invited parallel session talks will be uploaded to the conference website.

Conference Facilities

Speakers will be requested to upload their talk files to the Indico site where they submitted their abstract at least a day before their scheduled session. Only PDF (preferred) or PowerPoint files will be accepted. For safety, speakers are advised to bring a copy on a USB stick. The conference presentation laptops must be used. The use of personal laptops will not be allowed due to the complexity of the schedule where there will be seven parallel sessions running simultaneously.

Financial Assistance

Information about applying for limited financial assistance to facilitate participation in CIPANP 2012 is available at <http://cipanp2012.triumf.ca>. Priority for financial assistance will be given to the younger scientists (graduate students, postdoctoral fellows, research associates). The deadline for requesting financial assistance is **24 February 2012**.

Registration and Hotel Accommodations

Further information about the CIPANP 2012 scientific and social program, registration, accommodations, area attractions, and the Renaissance Vinoy Resort and Golf Club is also available on the CIPANP 2012 website. The CIPANP 2012 registration and hotel accommodation reservation page is now open.

Important Dates

1 June 2011	First Bulletin
1 October 2011	Abstract Submission begins
15 November 2011	'Early Bird' Registration begins
15 November 2011	Second Bulletin – Call for Papers
11 January 2012	Third Bulletin
1 February 2012	Fourth Bulletin
24 February 2012	Submission deadline for all Parallel Session and Poster abstracts
31 March 2012	Scientific Program fixed
31 March 2012	'Early Bird' Registration ends
1 April 2012	Standard Registration begins
27 April 2012	Student Early Registration ends
28 April 2012	Student Late Registration begins
16 May 2012	Standard Registration ends
28 May 2012	On-Site Registration begins
28 May 2012	CIPANP 2012 Registration opens
29 May 2012	CIPANP 2012 begins
3 June 2012	CIPANP 2012 ends
3 August 2012	Submission deadline for papers to be included in the Proceedings

Please direct inquiries to the Chair of the Organizing Committee, Dr. Willem T.H. van Oers, at vanoers@triumf.ca