Associacion Latino-Americana de Fisica Nuclear y Aplicaciones -ALAFNA

Alinka Lépine-Szily Instituto de Física-USP São Paulo, Brazil

Meeting WG9 IUPAP, MIT 24/07/2011

CHART OF SANTIAGO

The "Association of Latin American Nuclear Physics and Applications" (ALANFA) was formed in Santiago, Chile on Dec. 19, 2009, by representatives of Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

In Spanish is called "Asociación Latino Americana de Física Nuclear y Aplicaciones" ALAFNA

In Portuguese is called "Associação Latino Americana de Física Nuclear e Aplicações" ALAFNA

Chairs of ALANFA: Andrés Kreiner (Argentina)
Alinka Lépine-Szily (Brazil)

Steering Committee (SC) of ALANPA is formed by the 15 original founders:

Ricardo Alarcon (Arizona State Univ., USA)

Hugo Arellano (U. of Chile, Chile)

Haydn Barros (U.Simon Bolivar, Venezuela)

Maria Ester Brandan (UNAM, Mexico)

Roelof Bijker (UNAM, Mexico)

Laszlo Sajo Bohus (U.Simon Bolivar, Venezuela)

Fernando Cristancho (UNal, Colombia)

Paulo Gomes (U. Fed. Fluminense, Brazil)

Carlos Granja(Inst.Exp.Appl.Phys. Czech Tech.U. Czech Rep.)

Andrés Kreiner (Tandar, CNEA, Argentina)

Alinka Lépine-Szily (USP, Brazil)

Rubens Lichtenthäler (USP, Brazil)

Modesto Montoya (Inst. Per. Em. Nucl., Peru)

Roberto Morales (U. of Chile, Chile)

Alberto Pacheco (Tandar, CNEA, Argentina)

Objectives of ALANPA (ALAFNA)

- To strengthen ties among the Latin American Communities doing nuclear research and applications to foster collaborations and promotion of activities,
- To educate the scientific community and the general public through the promotion of nuclear physics and the peaceful uses of nuclear technology,
- To do periodic overall assessments of nuclear science in Latin America in the context of world wide activities, and
- To discuss at a multi-national level future planning of nuclear science activities in Latin America

Role of the Steering Committee:

- -establishment of ALAFNA governance rules
- -divulgation of ALAFNA in the scientific community
- -divulgation of ALAFNA within governments of Latin America with interest in nuclear science and applications

ALAFNA homepage was recently installed on the website of the IX Latin American Symposium on Nuclear Physics and Applications" july 18-22,2011, Quito, Ecuador

http://www.lasnpa-quito2011.org/alafna.org

Activities since the last meeting (Dec. 19, 2009)

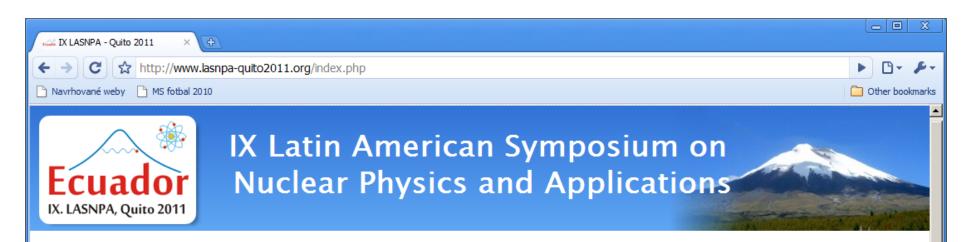
- Adoption of the Chart of Santiago (January 2010)
- Two-Day Symposium on International Nuclear Science of the IUPAP Working Group WG.9 TRIUMF on July 2-4, 2010
 - the IX Symposium under the auspices of IUPAP
- July 10, 2010: National Academy of Sciences (NP2010)
 - Text will be in the final report
- March 2011: NuPECC interest in collaboration (webpage)

Latin American Symposia on Nuclear Physics and Applications

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1995 Caracas, Venezuela
1998 Caracas, Venezuela
2001 San Andrés, Colombia
2004 Ciudad de México, México
2003 Santos, Brazil
2005 Iguazu, Argentina
2008 Cuzco, Peru
2011 Santiago, Chile
2014 Quito, Ecuador
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Scope: the dissemination of the major theoretical and experimental advances in the field of nuclear science and its applications.

The main topics to be covered are: Nuclear Structure and Reactions, Nuclear and Particle Astrophysics, Cosmic Rays, Hadron Structure and Phases of Nuclear Matter, Tests of Fundamental Symmetries and Properties of Neutrinos, Nuclear Instrumentation and Facilities: Radiation Detectors and Sources, and Applications in Medicine (Biomedical Imaging, Radiotherapy), Art/Archeology, Energy, Space and International Security.



LASNPA

Home Organizers Committees Contact Venue & Poster

Symposium

Scope & Topics Program & Events Invited Speakers List of Participants

Participants

Pre-registration / Log in Deadlines & Fees

Abstract & file submission Registration & Payment Slides of talks & Posters

Proceedings

Links

Previous Symposia Accommodation Quito & Ecuador Sponsors July 18-22, 2011 - EPN, Quito, Ecuador

IX Latin American Symposium on Nuclear Physics and Applications

The IX Latin American Symposium on Nuclear Physics and Applications will be held in <u>Quito</u>, Ecuador on 18-22 July, 2011. This event continues with the <u>series of Symposia</u> started in Caracas, Venezuela (1995, 1997), San Andrés, Colombia (1999), Ciudad de México, Mexico (2001), Santos, Brazil (2003), Iguazu, Argentina (2005), Cuzco, Peru (2007) and Santiago, Chile (2009).

Scope and Topics

The scope of the Symposium is the dissemination of the major theoretical and experimental advances in the field of nuclear science and its applications. The main topics to be covered are: Nuclear Structure and Reactions, Nuclear and Particle Astrophysics, Cosmic Rays, Hadron Structure and Phases of Nuclear Matter, Tests of Fundamental Symmetries and Properties of Neutrinos, Nuclear Instrumentation and Facilities: Radiation Detectors and Sources, and Applications in Medicine (Biomedical Imaging, Radiotherapy), Art/Archeology, Energy, Space and International Security.

Organizers

The local <u>organizer</u> of the Symposium is the Escuela Politécnica Nacional (<u>EPN</u>) Quito. The international <u>co-organizers</u> are the Institute of Experimental and Applied Physics (<u>IEAP</u>) of the Czech Technical University (<u>CTU</u>) in Prague, and Arizona State University (<u>ASU</u>).

Venue

The Symposium will take place at the <u>Hall of the University Theater Building</u> of the Escuela Politécnica Nacional, located in the district of "La Floresta" in the heart of the city of <u>Quito</u>.

Participants

The Symposium is intended to physicists and engineers working in the various fields of nuclear science, and to university students as well as staff from companies. Interested participants are invited to pre-register and submit an abstract for an oral or poster presentation. Students

Scientific Program of the IX LASNPA

IX Latin American Symposium on Nuclear Physics and Applications Scientific Program Overview

	MORNING	AFTERNOON
MONDAY, July 18	Plenary 1 (Auditorio)	Plenary 2 (Auditorio)
TUESDAY, July 19	Plenary 3 (Auditorio)	Parallel A1 (Auditorio), A2 (Aula 1), A3 (Aula2)
WEDNESDAY, July 20	Plenary 4 (Auditorio)	Parallel B1 (Auditorio), B2 (Aula 1), B3 (Aula2)
THURSDAY, July 21	Plenary 5 (Auditorio)	Parallel C1 (Auditorio), C2 (Aula 1), C3 (Aula2)
FRIDAY, July 22	Plenary 6 (Auditorio)	Plenary 7 (Auditorio)

Plenary 1: Applications of Nuclear Physics

(Bradley, Pinsky, Santos, Martisikova, Jakubek)

Plenary 2: Low Energy Reactions and Nuclear Structure

(Casten, Gomes, Tabor, Hinde, Bruce)

Plenary 3: Nuclear and Particle Astrophysics

(Wiescher, Barros, Tain, Gasques, Lepine-Szily)

Plenary 4: Hadron Structure and Phases of Nuclear Matter

(Schaefer, Bijker, Maas, Menchaca, Surrow, Carrera)

Plenary 5: Fundamental Symmetries and Physics beyond the Standard Model

(Garcia, Civitarese, Pocanic, Naviliat-Cuncic, McKeown)

<u>Plenary 6</u>: Nuclear Structure, Nuclear Reactions, and Exotic Nuclei

(Lichtenthaler, Padilla-Rodal, Dasgupta, Gade, Andreoiu)

Plenary 7: Nuclear Energy after Fukushima, Posters, and ALANFA Town Meeting

(Greaves, Tarifeno-Saldivia, Granja, Alarcon)

31 plenary talks

Parallel A1: Nuclear Structure and Reactions I

(Figuera, Martel, Pierroutsakou, Pires Kelly, Arellano, Pampa, Heinman)

Parallel A2: Advances in Nuclear Instrumentation and Facilities

(Bogacz, Ibrahim, Macario, Granja, Ribas, Silveira, Tarifeno-Saldivia, Viesti)

Parallel A3: Hadron Structure and QCD Nuclear Physics I

(Baghdasaryan, Mulhauser, Alarcon, Incera, Ferrer, Lee, Hakobyan)

Parallel B1: Nuclear Structure and Reactions II

(Clark, Podolyak, Zemlyanov, Varese, Medina, Gulshani, Danielewicz)

Parallel B2: Applications of Nuclear Physics I

(Rahman, Ayala, Brandan, Caicedo, Kreiner, Mulhauser)

Parallel B3: Hadron Structure and QCD Nuclear Physics II

(Pena, Wu, Cole, Djalali, Martinez, Paolone)

Parallel C1: Nuclear Structure and Reactions III

(Ferreira, Marti, Rubio, Assuncao, Id Betan, Hadizadeh, Pinzon)

Parallel C2: Applications of Nuclear Physics II

(Cristancho, Gonzalez, Sajo-Bohus, Cole, Correa, Rodriguez, Viesti)

Parallel C3: Tests of Fundamental Symmetries

(Djalali, Leckey, Opper, Salas)

<u>Poster Sessions:</u> Posters will be on **permanent display from Tuesday afternoon** (Aula 5). Judging takes place during a 4-5 PM session open to all on Friday afternoon.

58 talks in parallel sessions

http://videos.physics.asu.edu/LatinIX/program-IX-Latin-June30.pdf

Number of participants: 125

Less than in Chile (170), due to less local participation, air fares expensive from Brazil and Argentina, higher fee.
Next Symposium dec. 2013-Montevideo -Uruguay

Elements for the proposal to organize the X Latin American

Symposium on Nuclear Physics and Applications in 2013 in Uruguay

1. "Local" organizing committee

Raul Donangelo, Facultad de Ingeniería, Universidad de la República, Montevideo Gabriel Gonzalez Sprinberg, Facultad de Ciencias, Universidad de la República, Montevideo Oscar Naviliat Cuncic, NSCL, Michigan State University, MI, USA Carlos Salgado, Jefferson Laboratory, Newport News, VA, USA

We propose to organize the X-LASNPA in Uruguay. RD and GGS are the real local contacts and will take care of the local logistics. ONC and CS will fully participate in the organization from the US and committed to request additional financial support.

2. Tentative date

End of November - beginning of December 2013

This corresponds to the end of the academic year in Uruguay.

Accommodation and flights to Montevideo are cheaper since the high season starts few days before Christmas until February.

It is a nice season, between the end of spring and beginning of summer.

22/07/2011: ALAFNA meeting.

Open meeting, Participants: the present latin-american physicist: representatives of Argentina (A.Kreiner, G. Marti), Brazil (P. Gomes, A. Lepine-Szily, R. Ribas), Chile(R. Alarcon, H. Arellano), Colombia (f. Cristancho), Ecuador (C. Granja), Uruguay (O. Naviliat-Cuncic), Venezuela (H. Barros).

Agenda: ANDES project

ANDES: el laboratorio subterráneo ANDES y el Consorcio Latinoamericano de Experimentos Subterráneos (CLES)

Objetivo: Construcción de un laboratorio subterráneo de visibilidad internacional en el túnel Agua Negra

Datos Institucionales

- Instituciones: CNEA (Gerencia de Area de Investigaciones y Aplicaciones No Nucleares) e Instituto de Física de La Plata.
- Responsables Técnicos: Xavier Bertou (CNEA) Osvaldo Civitarese (IFLP)

Datos de contacto

- Correo electrónico: bertou@cab.cnea.gov.ar; osvaldo.civitarese@fisica.unlp.edu.ar
- teléfono:
 02944-445151 interno 38 (X. Bertou); 0221-4-246062 interno 276 (O. Civitarese)
 sitio web: http://bit.ly/andeslab

Sintesis del proyecto

Nombre del proyecto: ANDES (Agua Negra Deep-underground Experimental Site)

Objetivo: Construcción de un laboratorio subterráneo, adjacente al Tunel Internacional de Agua Negra (San Juan), para albergar experimentos de materia oscura, neutrinos, biología y geología. Se propone, asimismo, la creación de un consorcio (CLES) para integrar actividades académicas y de investigación, al tipo de las existentes en centros internacionales al tipo del INT (Seattle), ECT(Trento), Gran Sasso (Italia), CERN (Suiza).

Situated between 3.5-5km on Argentinian side, Thickness of the rock >1500 m.

The present members have discussed the project and those of the steering committee voted in favour of an endorsement.

However there is a worry about the cost of the project and the maintenance of the present funding of existing projects.

Also it was stated that the project should benefit the local and regional technological development.

Accelerator developement-Tandar

Bylaws of ALAFNA

The bylaws of the Association were discussed by all presents.

Some conclusions:

The association should be open to all nuclear scientists of the region (different from ANPHA or NUPECC)

The executive board should have 1 representative of each member country.

The bylaws were discussed but there was no time for the Redaction: Ricardo Alarcon will write up and will be voted by the steering

Proposal of Chile and Venezuela: Alafna should promote education for general public and schools on all levels, to compensate the negative effect on the general publics perception on nuclear science due to the Fukushima accident.

Conclusions:

Most countries in the region have small activity in basic Nuclear Physics research. Mostly radiation and medical applications. Very small number of scientists (each country <20).

Exceptions: Argentina (130), Brazil (400), Mexico (100)

Region has no large scale facilities in NP.

Small support from funding agencies even for maintenance of existing facilities.

ANDES project can change this scenario. Nuclear astrophysics: have a low energy, high current underground accelerator