

CIOp-UNLP Student Chapter. Annual Report. December 2015

This report presents the chapter's activities from December 2014 to December 2015. Some of them were held at Centro de Investigaciones Ópticas (CIOp), while others took place at different cities in Argentina.

1. Officers Information

- President: David Muñetón Arboleda (davidmuar@gmail.com)
- Vice-President: Angelica Mesa Yandy (angelicam@ciop.unlp.edu.ar)

2. List of current CIOp-UNLP Student Chapter members

- Demian Biassetti
- Pablo Constanzo Caso
- Andrés Escobar Mejía
- Valentín Guarepi
- Damián Gulich
- Luis Mendoza Herrera
- Angelica Mesa Yandy
- David Muñetón Arboleda
- Enrique Gustavo Neyra
- Alejandro Velez

Alumni

- Dafne Amaya
- Jesica Santillán
- Fabián Videla
- Gustavo Forte

3. Detailed Chapter activities

- Helped in the organization and attended the National Optics Students Meeting (EEOF2015, hosted by the Territorial Committee for Optics (Facultad de Ciencias Exactas y Naturales, Universidad Nacional del Nordeste, Corrientes - Argentina, 26th-29th May-2015). This year's topic was Photonics and Optics Applied to environment. Members from our chapter (and others from Argentina) attended this meeting and stayed for the National Optics Meeting (TOPFOT).
- Chapter President David Muñetón Arboleda attended the Student Chapter Leadership Workshop (August 2015) at San Diego Convention Center, San Diego, California, USA. During this event, chapter officers from Argentina, Colombia, Brazil, México, India, Chile and United States discussions about possible problems and solutions presented in student chapters.

- **Lectures at CIOp**

Guest Lecturers

- “Ab initio studies of ultrafast structural changes in femtosecond laser excited materials” Tobias Zier, University of Kassel, Germany. August 31st.
- “Cooperación científica, un caso con larga historia: CIOp – GOF” PhD. John Fredy Barrera Ramírez, Grupo de Óptica y Fotónica, Universidad de Antioquia, Medellín- Colombia. November 11th.
- “Espectroscopia de Materiales Luminiscentes”, PhD. Eugenio Cantelar, Universidad Autonoma de Madrid, Spain. December 11th.
- “Nano-fósforos luminiscentes activados con Eu^{3+} . $\text{NaGdF}_4:\text{Eu}^{3+}$ como caso modelo”, PhD. Eugenio Cantelar, Universidad Autonoma de Madrid, Spain. December 14th.

Local Lecturers

- “El sistema internacional de unidades (SI-1960) y su próximo futuro (¿2015?)” PgD. Mario Garavaglia, Investigador Superior de CONICET - Profesor Emérito de la UNLP - Centro de Investigaciones Ópticas (CONICET La Plata – CIC), April 13th.
- “Posicionado inteligente de la información en holografía digital” PhD. Roberto Torroba, Centro de Investigaciones Ópticas (CONICET La Plata – CIC), April 27th.
- “Iluminando los rayos” PhD. Gabriela Nicora, División LIDAR - Centro de Investigaciones en Láseres y Aplicaciones CEILAP (CITEDEF - CONICET), May 18th.
- “Fotobiología: biopsias ópticas y terapia fotodinámica del cáncer” Agustina Corti and María Eugenia Etcheverry Bachelors in Medical physics, Centro de Investigaciones Ópticas –CIOp, June 15th.
- “Energía solar termica de alta concentracion, posibilidades en la República Argentina”, Prof. Luis C. Martorelli, Bachelor in Medical physics, Facultad de Ciencias Astronómicas y Geofísicas, UNLP. June 29th.
- “Estudio de la interacción láser-materia al servicio del desarrollo tecnológico”, PhD. Gustavo A. Torchia, Centro de Investigaciones Ópticas – CIOp. July 13th.
- “Generación de radiación coherente en la banda xuv-soft x utilizando pulsos ultracortos intensos” Enrique Neyra, Bachelor in physics, Centro de Investigaciones Ópticas –CIOp. August 10th.
- “Adaptaciones tecnológicas para la inclusión de personas con discapacidad” Eng. Flavio Atilio Ferrari, Codirector de la UIDET UNITEC -Facultad de Ingeniería, UNLP. August 24th.
- “El rol de la simulación en la ciencia” PhD. Luis A. Pugnaroni, CONICET - UTN-FRLP. September 14th.
- “Perspectivas y posibilidades de aplicación del speckle dinámico” PhD. Héctor Rabal, CONICET. October 19th.
- “Investigación y desarrollo en el lemac centro de investigación vial UTN-FRLP” M. C. Ing. Gerardo Botasso, LEMaC Director, Centro de Investigación vial, Proff. at the Departamento de Ingeniería Civil and Secretario de Ciencia Tecnología y Posgrado UTN-FRLP. Noverber 2nd.
- “El iar y sus actividades científicas y tecnológicas” PhD. E. Marcelo Arnal, Instituto Argentino de Radioastronomía (IAR). November 30th.

▪ International Year of Light Activities

- “Graffiti Laser en el MAR”, Mar del Plata Museo Mar: Inaugural activity of International Year of Light, Laser graffiti on display outside the museum walls. January, 22nd and 23rd.
- "Festival de experiencias luminosas" Planetario La Plata: Experiments of laser and optics. Exposition: “Hágase la Luz”, May and June.
- "¿Qué edad tiene el laser?" Conference: PhD. M. Gallardo, Planetario La Plata: June 14th.
- "Festival de experiencias luminosas" Experiments of laser and optics. Conference “El MetroLUZ (Measuring using light: by the hand of the macroscale). PhD. M. Trivi. TOPFOT Corrientes. Divulgarion activities. Universidad del Nordeste, Corrientes, May 28th and 29th.
- "Festival de experiencias luminosas" Experiments of laser and optics for elementary and high school students, Escuela Raices Gonnet. La Plata, June 11th.
- “El mundo de la luz” Experiments show for students from Escuela Técnica No 8 at the CIOp, June 17th.
- "Festival de experiencias luminosas" Experiments of laser and optics at the Meeting Prociencia. Chivilcoy, July 2nd and 3rd.
- Conference “Ciencia y Tecnologia con Laser”. Lecturer PhD. M. Tebaldi, under the program: “La ciencia va a la escuela” at the 25 Mayo and Bolivar cities, July 14th.
- "Festival de experiencias luminosas" Graffiti laser. Tecnopolis, July.
- Conference “Las Huellas de la Luz”, Lecturer: PhD. F. Bredice, Planetario Buenos Aires, September 10th.
- "Festival de experiencias luminosas" Experiments of laser and optics. Planetario La Plata. Stellar Festival, September 5th.
- “El mundo de la Luz”. CIOp Stand, 2nd Congreso Internacional de Ciencia y Tecnología de la Provincia de Buenos Aires, Teatro Argentino, La Plata, October 1st.
- "El Mundo de la Luz" Experiments of laser and optics for elementary and high school students. Feria de Ciencias en SCFI Emanuel, Olmos La Plata, October 7th.
- “Festival de Luz”. Experiments of laser and optics for all audiences. Escuela N° 8, Chillar Prov. Buenos Aires. October 10th.

- Conference “Las Huellas de la Luz” Lecturer: PhD. F. Bredice. Escuela N° 8, Chillar Prov. Buenos Aires. October 10th.
- "El Mundo de la Luz" Experiments of laser and optics for elementary and high school students. Escuela 28 Villa Elisa La Plata, Octubre 15th.
- "El Mundo de la Luz" Experiments of laser and optics for Chemistry and Physics collage students, Instituto Superior de Formación Docente N° 156 “Palmiro Bogliano”, Azul, Prov. Buenos Aires. October 28th.
- “Festival de Luz”. Experiments of laser and optics for elementary and high school students. Escuela General Alvear Prov. Buenos Aires. October 30th.
- "El Mundo de la Luz" Experiments of laser and optics for elementary and high school students. Instituto G. E. Hudson, Hudson Prov. Buenos Aires, November 5th.
- Exposition “Festival de Luz”. Physics Museum, Museum Night, La Plata, November 28th.

▪ **Another Activities**

- Fellowship dinner (May 2015) the CIOp-UNLP Chapter held its annual fellowship dinner.
- Set of lectures about General Optics and Ophthalmic Optics with PhD. Mario Garavaglia. CioP August and September.

4. Details of planned activities for the future

- Help in the organization and collaboration for the TOPFOT 2016 (National Workshop in Optics and Photophysics) and the EEOF (School for Students of Optics and Photophysics), to be realized in 2016, in Buenos Aires, Argentina.
- Meetings and CIOp-UNLP SPIE Chapter membership managing.
- Organization of the 3rd Symposium of Plasmonics.
- Maintaining of Chapter Website.
- Printed information and publicity.

- Rural area school outreach.

- Local and guest Lecturers at CIOp and UNLP, Physics Department, Exact Sciences Faculty and Engineering Faculty.

5. Financial Information

Description	USD
Activity grant SPIE	700
Activity grant OSA	800
Beginning balance	1500
EEOF 2015	-550
IYL	-623
Seminars	-200
Dinner JOFA	-95
End balance	32

6. Pictures of some of the activities



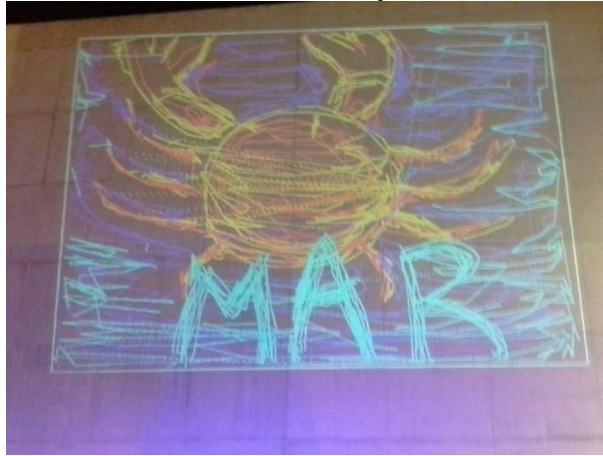
Laser Graffiti and optics experiments at Tecnopolis, Buenos Aires Argentina



Set of lectures about General Optics and Ophthalmic Optics with PhD. Mario Garavaglia.



Exposition of different optical experiments for elementary students at the CIOp.



Inaugural activity of International Year of Light, “Graffiti Laser en el MAR”, Mar del Plata



“Festival de Luz”. Physics Museum, Museum Night, La Plata



Laser graffiti on display outside the museum walls, Museo Mar, Mar del Plata.



Experiments of laser and optics for all audiences. Chillar Prov. Buenos Aires.



Exposition: "Hágase la Luz", Planetario La Plata, May and June.



"El Mundo de la Luz" Experiments of laser and optics for elementary school students.
Instituto G. E. Hudson, Hudson Prov. Buenos Aires.



Conference: "¿Qué edad tiene el laser?" PhD. M. Gallardo, Planetario La Plata



Participation in SPIE Leadership Workshop and Optics + Photonics 2015, San Diego – USA.



Fellowship Dinner with several members

David Muñetón Arboleda
CIOp-UNLP SPIE Student Chapter President
La Plata, Argentina December 11th, 2015