

Report on “Workshop on chaotic and nonlinear dynamics in circuits and systems” supported by the CASS Outreach Initiative 2015.

Title of the activity	Workshop on chaotic and nonlinear dynamics in circuits and systems
Name of proposer	Eric Campos Cantón
Total number of participants	61

The expenses

The expenses generated by the event were to support meal, lodging and transportation from different places of Mexico and also for promotion of the workshop. The sum of the expenses of this workshop is \$67,045,638.00 Mexican pesos and this is equivalent to \$3,920.00 USD, considering \$1 USD = \$17.1 Mexican Peso. Alongside this file you will find an attachment where expenses are detailed.

A brief Description

The Mexican workshop on chaotic and nonlinear dynamics in circuits and systems took place at Instituto Potosino de Investigación Científica y Tecnológica in San Luis Potosí (<http://www.ipicyt.edu.mx>), Mexico, which was held on December 7 and 8, 2015.

The target of this workshop was to meet researchers and postgraduate students in the area of chaotic and nonlinear dynamics. We received 61 participants: 21 speakers (attached you can find the program) from 14 different institutions, and 6 researchers and 34 postgraduate students assisted to the workshop from different parts of Mexico and local area.

The speakers presented their recent work on advances in chaotic and nonlinear dynamics in circuits and systems and we generated the memories of the workshop with 18 brief articles. The first article is the presentation article of the event and describes briefly the works that were presented. The other articles include contributions in three main research lines: Chaotic Circuits, Bio-inspired Systems and Fractional Dynamics.

Also the workshop had a poster section where 14 students presented their works: 1) P300 Brain-Computer Interface based on pattern recognition using non-linear classifiers; 2) Matemáticas aplicadas al control de sistemas de orden fraccionario; 3) Modelo Memresistivo de Hodgkin-Huxley; 4) Anti-Control de Enroscados Múltiples; 5) Cociente de Participación en estados coherentes regulares y caóticos del modelo de Dicke; 6) Synchronization of discrete-time dynamical networks with adaptive couplings

Anti-control de enroscados múltiples; 8) Generación de multiestabilidad variando el factor de potencia en un láser de fibra dopada con erbio; 9) Implementación experimental de la red máximo sincronizable; 10) Diseño de un sistema electrónico para la generación de Movimiento Browniano basado en un modelo determinista; 11) Autonomous Boolean networks with complex behavior; 12)

Dynamical s-boxes based on chaotic maps; 13) Synchronization of pancreatic beta-cell models and 14) Generation of Brownian motion via deterministic models.

List of speakers and participants

	Speakers	Institution	State
1	Sergio Adrián Lerma Hernandez	Univ. Veracruz	Veracruz
2	Moisés García Martínez	ECOSUR	Quintana Roo
3	Luis M. Torres Treviño	UANL	Nuevo León
4	Ma. Auxiliadora Araiza	UAZ	Zacatecas
5	Manuel Guía Calderón	U de Gto	Guanajuato
6	Jesús Manuel Muñoz Pacheco	BUAP	Puebla
7	Jorge A. López Rentería	U-IBERO	Distrito Federal
8	Jaimes R. Rider	U de G	Guadalajara
9	Gualberto Solis Perales	CUCEI UDG	Guadalajara
10	Guillermo Fernández Anaya	UIA	Distrito Federal
11	Guillermo Huerta Cuellar	U de G.	Guadalajara
12	Esteban Tlelo Cuautle	INAOE	Puebla
13	Eduardo Jiménez	El colegio Mexiquense	Estado de México
14	Baltazar Aguirre Hernández	UAM-I	Distrito Federal
15	Ernesto Zambrano Serrano	IPICYT-BUAP	Puebla
16	Francisco Cruz Ordaz Salazar	UPSLP	San Luis Potosí
17	Isaac Campos Cantón	UASLP	San Luis Potosí
18	Luis Javier Ontañón Garcia Pimentel	UASLP	San Luis Potosí
19	Salvador González Salas	UPSLP	San Luis Potosí
20	Eric Campos Cantón	IPICYT	San Luis Potosí
21	Juan Gonzalo Barajas Ramirez	IPICYT	San Luis Potosí
	Researchers Assistance		
22	Andrés Anzo Hernández	IF-UASLP	San Luis Potosí
23	Carlos Soubevielle Montalvo	UASLP	San Luis Potosí
24	Francisco Javier Cárdenas Flores	IPICYT	San Luis Potosí
25	Haret Codratian Rossu Barbus	IPICYT	San Luis Potosí
26	Irwin Allen Díaz Díaz	IPICYT	San Luis Potosí
27	Luis Díaz Saldierna	IPICYT	San Luis Potosí
	Students	Institution	State
28	José Luis Eचनाusia Monroy	U deG	Guadalajara

29	Victor Porfirio Vera Avila	U de G.	Guadalajara
30	Samuel Mardoqueo Afanador Delgado	U de G.	Guadalajara
31	José Manuel Islas Hernández	UAM-I	Distrito Federal
32	Carlos Javier López Cruz	UAM-I	Distrito Federal
33	Baldemar López del Carpio Juárez	UV	Veracruz
34	Alfredo Daniel Cortés Preciado	UANL	Nuevo León
35	Allan Giovanni Soriano Sánchez	UANL	Nuevo León
36	Otoniel García Sepúlveda	UANL	Nuevo León
37	Victor Hernán Torres Braver	UV	Veracruz
38	Pedro Texquis Flores	UAT	Tlaxcala
39	Ricardo López Hernandez	UAT	Tlaxcala
40	Ricardo Rendón Balderas	UAM-I	Distrito Federal
41	Adrian Karin Puerto Piña	IPICYT	San Luis Potosí
42	Adriana Ruiz Silva	IPICYT	San Luis Potosí
43	Alejandra del Carmen Arreola Delgado	IPICYT	San Luis Potosí
44	Anna Isabel Hernández Medina	IPICYT	San Luis Potosí
45	Antonio Reyes Obando	IPICYT	San Luis Potosí
46	Bahia Betzavet Cassal Quiroga	IPICYT	San Luis Potosí
47	Cynthia García Parra	UASLP	San Luis Potosí
48	Diana Graciela Hurtado	IPICYT	San Luis Potosí
49	Eber Jafet Avila Martinez	IPICYT	San Luis Potosí
50	Carlo Aurelio Beltrán González	IPICYT	San Luis Potosí
51	Elizabeth Flores Garduño	IPICYT	San Luis Potosí
52	Fernando Iván Mariscal Castillo	UASLP	San Luis Potosí
53	Héctor E. Gilardi Velazquez		San Luis Potosí
54	Jessica Carmin Mendiola	IPICYT	San Luis Potosí
55	Maximino Pérez Maldonado	IPICYT	San Luis Potosí
56	Moises Torres Rivera	IPICYT	San Luis Potosí
57	Nelida Elizabeth López Palau	IPICYT	San Luis Potosí
58	Ricardo Mota Varona	IPICYT	San Luis Potosí
59	Roberto Rafael Rivera Durón	IPICYT	San Luis Potosí
60	Rodolfo de Jesús Escalante González	IPICYT	San Luis Potosí
61	Victor Alejandro Méndez López	UASLP	San Luis Potosí

Expenses were generated by meal, lodging and transportation of the following persons and for promotion of the event.

Subject	Concept	Pesos	Dollars
ESTEBAN TRELO CUATLE	Meal, lodging and transport	4,092.80	239.34
GUALBERTO SOLIS PERALES	Meal and Lodging	1,949.80	113.97
LUIS MARTIN TORRES	Meal, lodging and transport	3,532.80	206.60
MOISES GARCIA	Meal, lodging and transport	2,279.80	133.32
JESUS MANUEL MUÑOZ	Meal, lodging and transport	3,172.80	185.54
MANUEL GUIA CALDERON	Meal, lodging and transport	2,993.80	175.08
SERGIO ADRIAN LERMA	Meal, lodging and transport	4,421.80	258.58
GUILLERMO FERNANDEZ	Meal	900.00	52.63
JORGE A LOPEZ RENTERIA	Meal, lodging and transport	3,924.80	229.52
ERNESTO ZAMBRANO	Meal, lodging and transport	3,172.80	185.54
BALTAZAR AGUIRRE HERNANDEZ	Meal and lodging	1,949.80	113.98
KAIMES R. RIDER	Meal and lodging	1,949.80	113.98
MARIA AUXILIADORA ARAIZA	Meal and lodging	1,949.80	113.98
PEDRO TEXQUIS FLORES	Meal and lodging	1,949.80	113.98
JOSE MANUEL ISLAS	Meal and lodging	1,949.80	113.98
CARLOS JAVIER LOPEZ	Meal and lodging	1,949.80	113.98
RICARDO RENDON	Meal and lodging	1,949.80	113.98
VICTOR HERNAN TORRES	Meal and lodging	1,949.80	113.98
BALDEMAR LOPEZ DEL CARPIO	Meal and lodging	1,949.80	113.98
RICARDO LOPEZ HERNANDEZ	Meal and lodging	1,949.80	113.98
ALFREDO DANIEL CORTES	Meal and lodging	1,949.80	113.98
ALBA GIOVANNI SORIANO	Meal and lodging	1,949.80	113.98
OTONIEL GARCIA	Meal and lodging	1,949.80	113.98
JOSE LUIS ECHENAUZIA	Meal and lodging	1,949.80	113.98
VICTOR PORFIRIO VERA	Meal and lodging	1,949.80	113.98
SAMUEL MARDOQUEO AFANADOR	Meal and lodging	1,949.80	113.98
EVENT	PROMOTION OF THE EVENT	5,407.33	316.22
Total		67,045.33	3920.02