

**ECONOPHYSICS,  
NEW ECONOMY & COMPLEXITY  
11<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE**

***“ENEC - 2018”***

**May 31 – June 2, 2018**

# **PROGRAMME**



**HYPERION UNIVERSITY  
and  
HYPERION RESEARCH & DEVELOPMENT INSTITUTE  
in partnership with  
BUCHAREST-ILFOV REGIONAL DEVELOPMENT AGENCY  
BUCHAREST, ROMANIA**

see: [www.enec.ro](http://www.enec.ro)

**ECONOPHYSICS,  
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**Professor Ion SPÂNULESCU, Ph.D.,**  
**President of the**  
**Hyperion University of Bucharest – Romania**

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MARIOARA IORDAN – *I.E.F., Romanian Academy, Romania*

CARMEN PĂUNA – *I.E.F., Romanian Academy, Romania*

***PROGRAMME SECTIONS OF THE CONFERENCE:***

***OPENING SESSION***

***FIRST SECTION: ECONOPHYSICS***

***SECOND SECTION: NEW ECONOMY***

***THIRD SECTION: COMPLEXITY***

# **OUTLINE OF PROGRAMME:**

## **THURSDAY, MAY 31**

### **CONFERENCE HALL – 6 FLOOR – BUILDING A**

**10<sup>00</sup> – 10<sup>30</sup> Participants' Registration & Welcome Coffee**

**10<sup>30</sup> – 11<sup>30</sup> OPENING SESSION**

– Opening Address – Professor Ion Spanulescu – Chairman

– Partner Address – Claudia Ionescu - *Regionalization vs.  
Globalization*

**11<sup>30</sup> – 12<sup>30</sup> – ECONOPHYSICS Section – Papers Presentation**

**12<sup>30</sup> – 12<sup>45</sup> – Coffee Break**

**12<sup>45</sup> – 14<sup>00</sup> – ECONOPHYSICS Section – continued**

**14<sup>00</sup> – 15<sup>30</sup> – NEW ECONOMY Section – Papers Presentation**

**15<sup>30</sup> – 16<sup>30</sup> – Scientific Lunch**

**16<sup>30</sup> – 17<sup>30</sup> – Discussions**

## **FRIDAY, JUNE 1**

### **CONFERENCE HALL – 6 FLOOR – BUILDING A**

**9<sup>00</sup> – 9<sup>30</sup> Participants' Registration & Welcome Coffee**

**9<sup>30</sup> – 11<sup>30</sup> – COMPLEXITY Section – Papers Presentation**

**11<sup>30</sup> – 11<sup>45</sup> – Coffee Break**

**11<sup>45</sup> – 14<sup>30</sup> – NEW ECONOMY Section – continued**

**14<sup>30</sup> – 15<sup>30</sup> – Scientific Lunch**

**15<sup>30</sup> – 16<sup>30</sup> – Discussions and closing speech**

## **SATURDAY, JUNE 2**

**9<sup>00</sup> – SHORT SCIENTIFIC TRAVEL – organized by Anda Gheorghiu and Organizing Committee of the conference.**

# SCIENTIFIC PROGRAMME:

THURSDAY, MAY 31

CONFERENCE HALL – 6 FLOOR – BUILDING A

11<sup>30</sup> – 12<sup>30</sup> – **ECONOPHYSICS Section<sup>1</sup>**

**Chairmen: Anca Gheorghiu**

**Matti Estola**

31C – E1 – *Willingness to Pay in the Theory of a Consumer*

**Alia Asha Dannenberg, Matti Estola**

University of Eastern Finland, Finland,

[matti.estola@uef.fi](mailto:matti.estola@uef.fi)

31C – E2 – *An Advanced Model for Mixed Economy*

**Ion Spanulescu, Anca Gheorghiu**

Hyperion University, Bucharest,

[rectorat@hyperion.ro](mailto:rectorat@hyperion.ro)

12<sup>30</sup> – 12<sup>45</sup> – **Coffee Break**

12<sup>45</sup> – 14<sup>00</sup> – **ECONOPHYSICS Section – continued**

31C – E3 – *“Zéta-Management” Categorical Introduction of Fractional and Non Additive Calculus for Applications in Managerial Strategies*

**Alain Le Méhauté<sup>1</sup>, P. Riot<sup>2</sup>, Laurent Nivanen<sup>3</sup>, Jean Paul Paquin<sup>4</sup> and S. Raynal<sup>5</sup>**

Materials Design (France) and Kazan Federal University (Russia)<sup>1</sup>, Zeta Innovation (France)<sup>2</sup>, ISMANS France<sup>3</sup>, Université du Québec à Hull (Canada)<sup>4</sup>, Université du Québec Chicoutimi – Paris Office<sup>5</sup>,

[alm@materialsdesign.com](mailto:alm@materialsdesign.com)

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<sup>1</sup> The Lecture Number Stands for:

31 – date (31 May)  
C – Conference Hall  
E – Conference Section (Econophysics)  
1 ... n – number of the paper

31C – E4 – *Unavowed Abstention, Poll Predictions and unexpected voting outcomes*  
**Serge Galam**

CEVIPOF - Centre for Political Research, Sciences Po and CNRS, Paris, France,  
[serge.galam@sciencespo.fr](mailto:serge.galam@sciencespo.fr)

31C – E5 – *Constructive and Numerical Study of the Specific Electrodynamic Process*

**Irina Dmitrieva**

Odessa National Academy of Telecommunications, Ukraine, [irina.dm@mail.ru](mailto:irina.dm@mail.ru)

31C – E6 – *The Chaotic Growth Model of the Arms-Producing Monopoly Output*

**Vesna Jablanovic**

University of Belgrade, Faculty of Agriculture, Serbia,  
[vesnajab@ptt.rs](mailto:vesnajab@ptt.rs)

## 14<sup>00</sup> – 15<sup>30</sup> – NEW ECONOMY Section

**Chairmen: Wioletta Wereda  
Anda Gheorghiu**

31C – NE1– *Urban regeneration with REGIO in Bucharest-Ilfov Region*

**Simona Curpan**

Bucharest-Ilfov Regional Development Agency, Romania,  
[simona.curpan@adrbi.ro](mailto:simona.curpan@adrbi.ro)

31C – NE2 – *Communication with Stakeholders in the Contemporary Innovative Enterprises – Model of Excellence in the Organization*

**Wioletta Wereda, Jacek Wozniak,**

Institute of Organization and Management, Military University of Technology,  
Warsaw, Poland, [weredawioletta@tlen.pl](mailto:weredawioletta@tlen.pl)

31C – NE3 – *REGIO 2014-2020 – Opportunity to Improve the Urban Mobility in Bucharest Ilfov Region*

**Ana Cristina Adumitroaei**

Bucharest Ilfov RDA, Romania, [acdumi2008@yahoo.com](mailto:acdumi2008@yahoo.com)

31C – NE4 — *Sovereign Wealth Funds: Green Capital Flows for a Climate Solution*

**Alexandru Cosmin Buteică, Cătălin Emilian Huidumac-Petrescu**

The Bucharest University of Economic Studies, Romania,  
[cosmin.buteica@gmail.com](mailto:cosmin.buteica@gmail.com)

31C – NE5 – *Migration and its Impact on Cities*

**Mariana Bălan, Sturzoiu Adriana**

Institute for Economic Forecasting-NIER, Romanian Academy, Romania,  
[dr.mariana.balan@gmail.com](mailto:dr.mariana.balan@gmail.com)



31C – NE6 – *Life cycle assessment (LCA): case study of products with smart textiles.*

**Marek Szajczyk, Marzena Wójcik-Augustyniak,**

Faculty of Economic and Legal Sciences Siedlce University of  
Natural Sciences and Humanities, Poland,  
[marekszajczyk@poczta.onet.pl](mailto:marekszajczyk@poczta.onet.pl)

31C – NE7 – *The Consolidation of European Migration Policies*

**Carmen Uzlau**

Hyperion University of Bucharest, Romania, [carmen\\_uzlau@yahoo.com](mailto:carmen_uzlau@yahoo.com)

31C – NE 8 – *The Effects of Developing the New Green Economy on Management Systems*

**Corina Ene**

Hyperion University of Bucharest, Romania, [corina.maria.ene@gmail.com](mailto:corina.maria.ene@gmail.com)

31C – NE9 – *The Financial Crisis & Cryptocurrencies*

**Niță Sorin Cristian,**

The Bucharest University of Economic Studies, Romania,  
[nitasorincristian@gmail.com](mailto:nitasorincristian@gmail.com)

31C – NE10 – *The Gray Economy*

**Ghiorghian Elena Roxana,**

The Bucharest University of Economic Studies, Romania (student),  
[ghiorghian\\_elena\\_roxana@yahoo.com](mailto:ghiorghian_elena_roxana@yahoo.com)

31C – NE11 – *A Review of the Single Digital Market Impact within the European Union*

**Ovidiu Antoniu Balint**

Hyperion University of Bucharest, Romania, [balint\\_antoniu\\_ovidiu@yahoo.com](mailto:balint_antoniu_ovidiu@yahoo.com)

15<sup>30</sup> – 16<sup>30</sup> – **Scientific Lunch**

16<sup>30</sup> – 17<sup>30</sup> – **Discussions**

**FRIDAY, 01 JUNE**  
**CONFERENCE HALL – 6 FLOOR – BUILDING A**

**9<sup>30</sup> – 11<sup>30</sup> – COMPLEXITY Section**  
**Chairmen: Alain Le Méhauté**  
**Nicolae Popoviciu**

*01C – C1 – A Complete Study of the Rotations in the Plane and Space. Mathematical Models. Informatics Models.*

**Nicolae Popoviciu**  
Hyperion University of Bucharest, Romania, [nicolae.popoviciu@yahoo.com](mailto:nicolae.popoviciu@yahoo.com)

*01C – C2 – Energy Policy of the European Union. New Challenges*

**Dorel Bahrin**  
Hyperion University of Bucharest, Romania, [bahrin\\_d@yahoo.com](mailto:bahrin_d@yahoo.com)

*01C – C3 – The importance of Europeanization in developing the European ex – communist countries in the transition period*

**Bogdan Lucian Cumpanasu**  
National School of Political Studies and Public Administration, Bucharest, Romania, [cumpanasu\\_bogdan@yahoo.com](mailto:cumpanasu_bogdan@yahoo.com)

*01C – C4 – Social awareness in the New Economy*

**Andrei Emil Moise**  
Hyperion University of Bucharest, Romania, [andrei\\_e\\_moise@yahoo.com](mailto:andrei_e_moise@yahoo.com)

*01C – C5 – The Complexity Science Applied in Psychology*

**Aliodor Manolea**  
Hyperion University of Bucharest, Romania [aliodor@glide.ro](mailto:aliodor@glide.ro)

**11<sup>30</sup> – 11<sup>45</sup> – Coffee Break**

## 11<sup>45</sup>–14<sup>30</sup> – NEW ECONOMY Section continued

**Chairmen: Wioletta Wereda  
Anda Gheorghiu**

01C – NE12 – *Latest developments of the Sharing Economy in Romania*

**Anda Gheorghiu**

Hyperion University of Bucharest, Romania, [anda.gheorghiu@gmail.com](mailto:anda.gheorghiu@gmail.com)

01C – NE13 – *Increased Labor Productivity through Labor Force Restructuring. Did the Romanian Economy Lose its High Skilled Labor Force?*

**Dospinescu Andrei Silviu**

Hyperion University & Center for Industrial Economics and Services, Romanian Academy, [andreidospinescu@yahoo.com](mailto:andreidospinescu@yahoo.com)

01C – NE14 – *Initiatives and challenges of Smart City in Bucharest-Ilfov Region*

**Liviu Rancioaga**

Bucharest-Ilfov Regional Development Agency, Romania,  
[liviu.rancioaga@adrbi.ro](mailto:liviu.rancioaga@adrbi.ro)

01C – NE15 – *The Impact of Regulation on the Mortgage Market*  
**Adelina Elena Stan, Cătălin Emilian Huidumac-Petrescu**

The Bucharest University of Economic Studies, Romania,  
[adelinastan205@yahoo.com](mailto:adelinastan205@yahoo.com)

31C – NE16 – *World Foreign Direct Investments. The Eurasian Continent or a Kind of Autonomous Capital Market*

**Dalina Andrei<sup>1</sup>, Liviu C.Andrei<sup>2</sup>**

Institute of Economic Forecasting of the Romanian Academy of Sciences in Bucharest<sup>1</sup>, Institute of Economic Forecasting of the Romanian Academy of Sciences in Bucharest<sup>2</sup>, Romania,  
[dalinaandrei@yahoo.com](mailto:dalinaandrei@yahoo.com)

01C – NE17– *Japanese Economic Development Lessons for  
China*

**Cătălin Emilian Huidumac-Petrescu, Ionela Voinea**

The Bucharest University of Economic Studies, Romania,  
[catalinhuidumac@yahoo.com](mailto:catalinhuidumac@yahoo.com)

**14<sup>30</sup> – 15<sup>30</sup> – Scientific Lunch**

**15<sup>30</sup> – 16<sup>30</sup> – Discussions and Closing Speech**

# SATURDAY, JUNE 2

## 9<sup>00</sup> – SHORT SCIENTIFIC TRAVEL

TIME	ACTIVITY
9	Departure from <b>Bucharest</b> by Minibus
10:30	Arrival in village <b>Potlogi</b> , located 45 km Northwest of Bucharest. <b>Visit of Potlogi Brâncovenesc Palace</b> , raised by the ruler of Wallachia, Constantin Brancoveanu in 1698. This king was one of the most cultivated personalities of his time. Brâncoveanu style is distinguished by the expressiveness of the architectural volumes of the outer stairs, of the arbores or loggias. After the death of Constantin Brâncoveanu and his sons in Istanbul (1714), the Ottomans devastated the palace, seeking the gold and treasures of 'Altan bey' - the Prince of Gold, as they called Brâncoveanu. Now, the palace is restored.
12:30	Departure to Știrbey Domain (alt.400 m), in a small town, Buftea. In a secular park with an opening to Lake Buftea, with an indoor lake and sights such as Știrbey Palace (1864), Water Tower (architect Anghel Saligny) and Știrbey Chapel (1859), there is a restaurant with terrace. The menus are conceived by Antonio Passarelli, at Italian chef and TV star.
14	Lunch. Enjoy the taste of the Romanian dishes, wines or beer and discuss the latest trends in econophysics, complexity and new economy ☺ If weather allows, after lunch we can revisit Mogoșoaia Palace nearby that some participants to the conference remember from a previous edition of ENEC.
16:30	Visit of Mogoșoaia Palace (built until 1702 by Constantin Brâncoveanu) a real masterpiece of medieval history and art. We will take a few moments to admire the lake and the enchanting flowers planted in the garden.
18	Departure back to Bucharest
19.30	Arrival to Bucharest

*The distance between Bucharest and Potlogi is 45 km (by car).*

## IMAGES FROM THE PLACES WE WILL VISIT













Zâmbet și sănătate



Zâmbet și sănătate



# INSTRUCTIONS FOR AUTHORS

## Submission of papers

For ENEC International Conference, authors are encouraged to send theoretical and/or experimental contribution concerning up-to-date research, before the end of April every year.

Only original papers and invited papers in English are considered. To qualify for publication, papers must be previously reviewed by members of the Advisory Board and after presentation in the one of section of ENEC Conference. Submission of papers must be made to the Paper Submission section on the Conference Website: [www.enec.ro](http://www.enec.ro).

### Papers structure and preparation

The following structure of a paper is recommended: 1. Introduction, 2. Experimental (Theory, Modeling, ...), 3. Results, 4. Discussion, 5. Conclusions.

The first page must contain:

- Title of paper (main title underlined);
- Authors names and the institute where the work was conducted;
- Keywords, for indexing purposes;
- Abstract.

The exact address complete, with a postal code of the principal author must be given. Add e-mail if possible.

For the preparation of the Conference Proceedings, please upload the abstract and the full paper in English, in electronic format to the Conference Website: [www.enec.ro](http://www.enec.ro)

In order to publish in the Proceedings of ENEC Conference, the manuscripts should be submitted in duplicate sets of illustration (of which one is original) typewritten double-spaced on one side of the paper, with a wide margin. In case of the manuscripts in electronic form, the operating system and word processing software used to produce your document should be WORD for WINDOWS. The following rules for text processing should be used. Main text and equations: Times New Roman 11 pt, spacing: single, first line; left indent 0,5 cm, alignment: justified Footnotes, figure explanations: Times New Roman 9 pt, spacing: single, first line; left indent 0,5 cm, alignment: justified Table content: Times New Roman 9 pt, spacing: single, alignment: centre References: Times New Roman 9 pt, spacing: single, first line; left indent 0,5 cm, alignment: justified, Author's names – plain; Books titles – italic; Publication titles – plain; Tome no. – bold.

References will be consecutively numbered in the text and collected at the end of the paper in the following style for journals, proceedings, books and sites, respectively:

- [1] D. K. Faley, *A Statistical Equilibrium Theory of Markets*, J. Econ. Theory, 62, 321-345 (1994) or D. K. Faley, J. Econ. Theory, **62**, 321 (1994).
- [2] I. Dmitrieva, *Diagnolization problems in the classical Maxwell theory and their industrial applications*, Proc. of ENEC 2008 International Conference, Victor Publishing House, Bucharest, Romania, 2008, p. 11.
- [3] R. N. Mantegna & H. E. Stanley, *An Introduction to Econophysics*, Cambridge University Press, Cambridge, 2000.
- [4] I. Spânulescu and Anca Gheorghiu, *Economic Amplifier – A new Econophysics Model*, in: arXiv.org > q.fin > arXiv: 0707.3703, 25 July 2009.

For papers written by economists the following style also can be used:

- [1] Galam, S. (2002), *Minority Opinion Spreading in Random Geometry*, European Physical Journal B 25, pp. 403-406
- [2] Amisano G. and Giannini C. (1997), *Topics in Structural VAR Econometrics*, Springer Berlin

Numbers of References must be limited (up to 20 references).

Figures and tables must be introduced in the text with their legends.

The manuscripts should be as concise as possible. Original whose length exceeds 12 pages are strongly discouraged.

The manuscripts should be sent to the following addresses:

Elena PETCU

HYPERION University of Bucharest 169, Calea Calarasilor, 030615, Bucharest, ROMANIA Phone: 401-323 41 67; 401-321 46 67, Fax: 401-321 62 96, and by e-mail or to: [rectorat@hyperion.ro](mailto:rectorat@hyperion.ro);

Olivia STĂNESCU

HYPERION University of Bucharest 169, Calea Calarasilor, 030615, Bucharest, ROMANIA Phone: 401-323 83 09; 401-321 46 67, Fax: 401-323 83 09, and/or by e-mail to: [office@hyperion.ro](mailto:office@hyperion.ro)

**ENEC 2018 INTERNATIONAL CONFERENCE IS INITIATED AND  
ORGANIZED BY:**

**HYPERION UNIVERSITY OF BUCHAREST**

**AND**

**HYPERION RESEARCH AND DEVELOPMENT INSTITUTE**



**IN PARTNERSHIP WITH**

**BUCHAREST-ILFOV REGIONAL DEVELOPMENT AGENCY**

