

<b>Date</b>	05/02/2019
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## A. PERSONAL INFORMATION

Name	Annick LARUELLE		
NIE	X4070616F	Age	51
Researcher numbers	Researcher ID	H-7666-2015	
	Orcid Code	0000-0002-7065-7070	

### A.1. CURRENT SITUATION

University	Universidad del País Vasco-Euskal Herriko Unibertsitatea (UPV/EHU)		
Department	Fundamentos del Análisis Económico I Facultad de Economía y Empresa		
Address	Avenida Lehendakari Aguirre 83 – 48015 BILBAO		
Phone	946013782	email	annick.laruelle@ehu.eus
Current position	IKERBASQUE Research Professor	From	2008
UNESCO Codes	120706, 120904, 530715, 530905		
Keywords	Social Choice and Game Theory		

### A.2. EDUCATION

Ph. D.	University	Year
Economics	Université catholique de Louvain, Belgium	1998

### A.3. QUALITY OF RESEARCH OUTPUT

- Web of Science
  - 369 citations, h-index: 8
  - 6 Publications Q1 in JCR
    - 2001 Science edition (Mathematics of Operations Research)
    - 2007 Social Science Edition (Journal of Economic Theory)
    - 2008 Social Science Edition (Games and Economic Behavior)
    - 2015 Journal of Statistical Mechanics – Theory and Experiment
    - 2018 European Journal of Operation Research
    - 2018 Communications in Nonlinear Science and Numerical Simulation
  - Publications in 13 different JCR categories
    - Applied Mathematics
    - Biology
    - Economics
    - Interdisciplinary applications of Mathematics
    - Mathematical and Computational Biology
    - Mathematical Psychology
    - Mathematical Methods in Social Science
    - Mathematical Physics
    - Mechanics
    - Multidisciplinary Sciences
    - Operations Research and Management Science
    - Political Science
    - Statistics and Probability
- Scopus: 456 citations, h-index: 10
- Google Scholar: 1309 citations, h-index: 17
- Co-director of 3 Ph.D thesis

## Part B. CV SUMMARY

### *Academic Experience*

- 2005-2008: Professor, Université de Caen Basse-Normandie, France
- 2001-2005: "Ramón y Cajal" Fellow, Universidad de Alicante
- 2000-2001: Post-doctoral Fellow (grant from the Basque Government), UPV/EHU
- 1998-2000: Post-doctoral Fellow (grant from the EU), Universidad de Alicante
- 1993-1998: Research and Teaching assistant, Université catholique de Louvain

### *Research Interests*

- Voting Theory and electoral systems
  - How should votes be distributed in the EU Council of Ministers? When should simple majority be preferred to 2/3-Majority or unanimity? Application of the egalitarian principle of "One person one vote" or the utilitarian principle may help to answer the questions. The answer is however more complex when the members of the committee represent groups of very different sizes.
  - My first co-author on these questions was the late Mika Widgrén but I have mainly worked with Federico Valenciano. Other co-authors on these issues are Josune Albizuri, Alaitz Artabe, Ricardo Martinez, Vincent Merlin.
  - In polls many citizens express some dissatisfaction with politicians. Usual ways to voice this dissatisfaction in elections are absenteeism, spoiled or blank vote, or voting for a political newcomer or a fringe candidate. No legitimate and explicit negative option is generally offered to electors. Why our democracies do not allow expressing disagreement in an explicit way in elections? More generally I am interested participation in elections or alternative voting procedures.
  - I have worked on these questions with Jose Carlos Alcantud, Sébastien Courtin, Constanza Fosco, Stéphane Gonzalez, Nora Ibarzabal, Ricardo Martinez, Esther Mata-Perez, Giovanni Ponti Angel Sanchez, Philippe Solal.
- Discrimination
  - Experiments with domestic fowls show evidence of behavioral changes when a proportion of the population is marked on the back of their heads. The most salient result is that marked birds suffer more aggression than their unmarked pen mates. Can this experiment result be reproduced in a game theoretical framework? The answer is positive: artificial distinction generates real discrimination. The question can also be addressed for human behavior, when individuals know who they are but do not know how they are perceived.
  - Elena Iñarra and I modeled the variation of the Hawk-Dove game. My other co-authors on these questions are Andre Barreira da Silva Rocha, Ramon Escobedo and Peio Zuazo-Garin.
  - The use and knowledge of minority languages in the European Union vary much according to the countries. The relation between the use and the knowledge of a minority language is not linear. How can we explain the use of a minority language when it is in contact with a majority language? What is the dynamics of the minority language use?
  - My co-authors on these questions are Andre Barreira da Silva Rocha, Ramon Escobedo and Noemi Navarro.

## *Communicating Science*

- Talks for general audience
  - “Semana de la Ciencia”, 2014;
  - “NAUKAS”, 2018
- Talks for teenagers
  - “Jakinmina”, 2013,
  - “IKERBASQUE training Caravan”, 2010-2012
- Articles
  - for “mapping ignorance”, January 2014 and March 2013.
  - for “the conversation”, January 2019

## *Teaching and administrative activities at UPV/EHU*

- Teaching at master level since 2013
- Director of a Máster in Economics 2013-2015  
(“Máster interuniversitario en economía: instrumentos del análisis económico”)

## **C. RELEVANT MERITS**

### **C.1. Publicacions**

- *Voting Theory and electoral systems*
  - Alcantud, J.C.R. and A. Laruelle, 2018, Collective identity functions with status quo, *Mathematical Social Sciences* 93, 159-166.
  - Ibarzabal, N. and A. Laruelle, 2018, Ghost Seats in the Basque Parliament, *European Journal of Operational Research*, 264, 354-363.
  - Alcantud, J.C.R. and A. Laruelle, 2014, Disapproval voting: a characterization, *Social Choice and Welfare* 43, 1-10.
  - Albizuri, J. and A. Laruelle, 2013, An axiomatization of Success, *Social Choice and Welfare* 41, 145-155.
- *Discrimination*
  - Laruelle, A., N. Navarro and R. Escobedo, Forthcoming, December 8, Proficiency, Attitude and Conventions in Minority Languages. *Sociological Methods and Research*
  - Barreira da Silva Rocha A., R. Escobedo R., and A. Laruelle, 2015, Emergence of cooperation in phenotypically heterogeneous populations: a replicator dynamics analysis, *Journal of Statistical Mechanics – Theory and Experiment* P06003, 20 pages.
  - Iñarra, E., A. Laruelle, and P. Zuazo-Garin, 2015, Games with Perception, *Journal of Mathematical Psychology* 64-65, 58-65.
  - Iñarra, E., and A. Laruelle, 2012, Artificial Distinction and Real Discrimination, *Journal of Theoretical Biology* 305, 110-117.
  - Barreira da Silva Rocha, A. and A. Laruelle, 2013, Evolution of Cooperation in the Snowdrift Game with Heterogeneous Population, *Advances in Complex Systems* 16(8).

### **C.2. Research projects and grants since 2013**

- *2016-2019: Interacción social y económica ECO2015-67519-P*
  - Supported by the Spanish Ministry of Economy and Competitiveness
  - 9 members (+ 5 doctors). Amount granted: 37,800 €
  - Role: Main Researcher (IP), jointly with E. Iñarra

- 2013-2018: *Teoría de Juegos y Elección Social* (Proyecto I+D. Código: IT568-13)
  - Basque Government.
  - 10 members. Amount granted: 291,998 €
  - Role: Member of the team (IP: Casilda Lasso de la Vega).
- 2012- 2016: *Computational Social Choice (ICT action IC1205)*
  - Supported by the European Cooperation in Science and Technology (COST)
  - 31 countries involved, Management Committee of 37 members
  - Amount granted: 681,199 €
  - Role: Member of the Steering Committee (Chair of one working group)

## C.5. Invited seminars since 2013

- 2016, Jean Monnet University, Saint-Etienne, France
- 2016, Open University of Germany, Hagen, Germany
- 2016, HHL Leipzig Graduate School of Management, Germany
- 2016, University of Cergy-Pontoise, France
- 2015, Université de Cergy-Pontoise France
- 2015, Université Paris 1 Pantheon-Sorbonne, France
- 2014, University of Bayreuth Germany
- 2014, Universitat Rovira I Virgili, Reus
- 2013, Universitat Autònoma de Barcelona
- 2013, Université de Caen Basse-Normandie, France
- 2013, Tinbergen Institute, Netherlands

## C.6 Presentations at conferences since 2013

- 2016, XIII Meeting of the Society for Social Choice and Welfare
- 2015, XXXX Symposium of the Spanish Association of Economics
- East Asian Game Theory Meeting
- 2014, 48<sup>th</sup> Congress of the International Society for Applied Ethology
- 2013, Meeting of the Association of Southern European Economic Theorists
- 2013, 14<sup>th</sup> Conference of the association for Public Economic Theory

## C.7. Organization of conferences, workshops and summer schools since 2013

- 2018 Mathematics and Politics: Democratic Decision-Making, Hanover, Germany
- 2017, Beyond simple majorities and single-winner elections, Dagstuhl, Germany
- 2016, Computational Social Choice, San Sebastian
- 2015, Computational Social Choice sixth workshop (COST IC1205), Istanbul, Turkey
- 2016, Simposio of the Spanish Economic Association (Job Market Chair), Bilbao
- 2014, Summer School: Interdisciplinary Analysis of Voting Rules, Caen, France

## C.8. International committees since 2013

- 2015, 2016 Member of HDR committee (accreditation to supervise research): Université de Cergy-Pontoise (France, 2015), Université Jean Monnet (France, 2016)
- 2013-2017, Member of the Council of the Society for Social Choice and Welfare
- 2016, Member of Ph.D committee, University Paris Dauphine, (France, 2016), Université de Cergy-Pontoise (France, 2016).

## C.9. Languages:

- French (native), Spanish (fluent), English (fluent).