PhD in Behavioral and Experimental Economics

Position	- PhD in Behavioral and Experimental Economics.
General information	- The PhD starts on 0ctober 1, 2020, and lasts for 36 months : 18 months at GAEL Laboratory (Grenoble Applied Economics Lab) at Université Grenoble Alpes (Grenoble, France) and 18 months at iGLOBES Laboratory (Interdisciplinary and Global Environmental Studies) at University of Arizona (Tucson, Arizona, USA). - The person recruited will be attached to the Doctoral School of Economics at Université of Grenoble Alpes (UGA) under the supervision of Sabrina Teyssier (INRAE Research Fellow in Economics at GAEL, https://gael.univ-grenoble-alpes.fr/people/sabrina-teyssier?language=en). - This position is a doctoral contract with international mobility funded by the InSHS of the CNRS. - Work share: 100%. - Compensation: 2135€ gross monthly.
Description of the PhD topic	- The PhD is in Economics and focuses on: **"Changes in norms and inequalities in the face of climate change".** - Context: Climate change has disruptive effects for Society as a whole, affecting all regions of the planet, all sectors and the population of today and tomorrow. Beyond the environmental consequences, global warming is a source of tension around access to essential resources such as water and food. It also enhances public health problems, the risk of climate conflicts and tensions between social groups. In this context, the decision-making context evolves and the interactions between agents change. These evolutions must be taken into account in order to better understand individual behaviors so as to better define more effective public policy programs *ex ante*. - Aim: The aim of the PhD program is to study how changes in the decision context and interactions between agents induced by global warming can make social norms changing and limit individuals' participation to global warming. A particular attention will be paid to the role of inequalities on the evolution of norms. - Scientific areas and themes: Limiting global warming is beneficial for Society as a whole, but each individual must bear an additional cost if she chooses to change her behavior to reduce her participation to climate change. This is a social dilemma and then, it inevitably involves *free-riding* behaviors. Therefore, voluntary cooperation between individuals is essential to limit global warming. Advances in behavioral economics and experimental economics have improved knowledge about individual behavior in social dilemma games and the PhD research program lies in this area of research. It has been found that of voluntary cooperation is observed and depends on the institution in place and also on the behavior of other individuals. The role of social interactions underlines the importance of considering the dynamics of behaviors to study voluntary cooperation. An emerging

	approach in economics to explain the dynamics of behaviors with social interactions, which the thesis will rely on, is based on social norms (Bicchieri, *Cambridge Univ. Press*, 2006). Social norms are defined as shared collective rules that define which behaviors are seen as socially appropriate and acceptable within a group. Individual behaviors may fall within the norm in place because of an individual's desire to be approved by others and to conform to the norm. Social norms are seen as solutions to foster cooperation between individuals (Nyborg et al., *Science*, 2016) but their effectiveness depends on individuals' perceptions of the norm. The perception of the norm of cooperation is widely shared when the group is homogeneous but different perceptions of the norm emerge when there are inequalities of wealth between individuals (Reuben and Riedl, *Games Econ. Behav.*, 2013). Changes in social norms may help limiting global warming but inequalities between individuals need to be taken into account. Indeed, the existence of inequalities implies questions regarding the reference point, which is not necessarily the same for each individual and therefore reduces the development of the norm. The aim of the PhD thesis will be to determine the role of these inequalities on the evolution of social norms. - Method: Experiments will be conducted to test the theoretical mechanisms underlying the changes of norms. Some of the experiments will be conducted in the laboratory with a high level of control in order to have the highest internal validity. In a second stage, field experiments will be conducted to study behaviors in real situations. The probable field of application is water consumption and management: the objective will be to investigate how individuals vary their water consumption according to an external intervention (tariff, information, consumption of neighbors, etc). The intervention that will be tested will depend on the results obtained from laboratory experiments. Real inequalities in wealth will be measured and controlled for. - Objectives for the valorization of the doctoral student's research work: The doctoral student will have to produce three original research papers. He/she will present them at international conferences and submit them for publication in scientific journals in Economics. A publication in an interdisciplinary journal may be considered for the field experiment. - References: Bicchieri, C. (2006). *The grammar of society: The nature and dynamics of social norms*. Cambridge University Press, Cambridge, MA. Nyborg, K. et al. (2016). « Social norms as solutions ». *Science, 354(6308)* : 42–43. Reuben, E. and A. Riedl (2013). « Enforcement of contribution norms in public good games with heterogeneous populations ». *Games and Economic Behavior, 77(1)* : 122–137.
Working environment	- The first part of the PhD will take place at the GAEL laboratory (Grenoble Applied Economics Laboratory) associated with CNRS, INRAE and Université Grenoble Alpes. He/she will carry out economic experiments at the GAEL experimental economics laboratory. This laboratory organizes

	experiments with students and also with consumers from the general population and respects the rules of experimental economics such as the implementation of financial incentives and the non-use of disappointment. The doctoral student will benefit from the expertise of GAEL researchers in behavioral and experimental economics, particularly within the "Consumption and Product Supply" group. The PhD supervisor's research is included in this axis. She is currently coordinating a research project funded by the French Research Founding Agency (ANR) on "Social interactions, social norms and sustainable food consumption". - The second part of the PhD will be completed at the interdisciplinary laboratory iGLOBES in Tucson, Arizona. During this period, the doctoral student will directly interact with the COOCLIMATH project team, whose objective is the development and analysis of a general mathematical model of individual behavior in response to climate change. Such interactions will enable the PhD student to better understand the global issues related to global warming, in particular the issue of access to water resources. This research program will be conducted in collaboration with the teams already partnering with IRL iGLOBES at the University of Arizona (notably the Udall Center for Public Policy and the Water Resources Research Center). Interactions will also be possible with researchers from the Department of Economics at the Eller College of Management at the University of Arizona who are world-renowned specialists in the field of behavioral and experimental economics.
Constraints and risks	- The PhD position is a doctoral contract with international mobility. The PhD student will have to spend part of his/her time at the GAEL laboratory in Grenoble and the other part at the iGLOBES laboratory in Tucson. The time in Tucson will last approximately 18 months.
Further information	- The candidate must hold a Master in Economics. - Required skills: solid foundations in microeconomics, game theory and econometrics and knowledge of behavioral and experimental economics. A good level of English is required. - Applications include a detailed CV, a cover letter, Master 1 and Master 2 grades, Master 2 thesis and two references (who may be contacted). - Applications on https://emploi.cnrs.fr/Offres/Doctorant/UMR5313-SABTEY-001/Default.aspx?lang=EN before August 20, 2020.