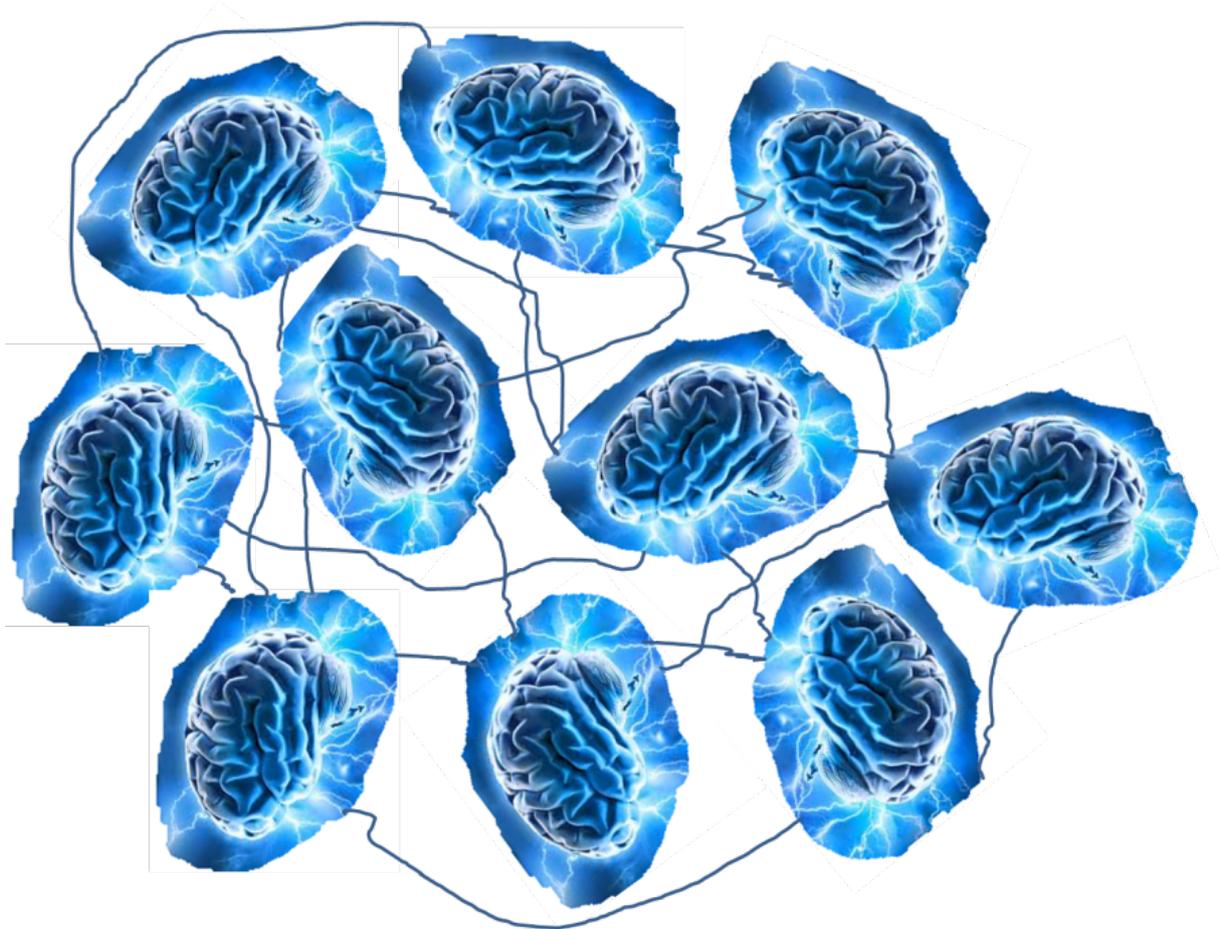
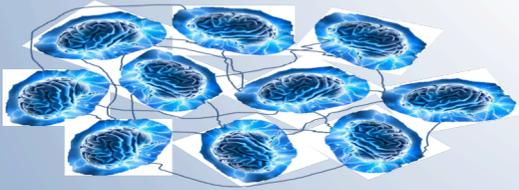


FROM ONE MIND TO MANY
Collective threat and collective resilience workshop
20 & 21 October 2016

EHESS (Cadis CNRS UMR 8039)

CADIS
centre d'analyse et
d'intervention sociologiques





Programme

Thursday, October 20th

17H Welcome – Bienvenue

18H – 19H **Thomas Pyszczynski** (*University of Colorado at Colorado Springs*)
War and peace: a terror management theory perspective on terrorism and its consequences on targeted populations

Friday, October 21st

9H30 **Introduction by Serge Guimond** (*CADIS, LAPSCO CNRS*)

10H – 10H30 **Jocelyn Bélanger** (*New York University, Abu Dhabi*)
The rise and fall of violent extremism: the science behind community-based interventions

10H30 – 11H Discussant: Michel Streith (*LAPSCO CNRS*)

11H – 11H30 **Floriana Gargiulo** (*GEMASS, Paris 4*)
Influence of homophily on radicalization dynamics

11H30 – 12H30 Discussant: Sylvie Huet (*IRSTEA, LISC*)

13H Lunch

14H30 – 15H **Jan Lorenz** (*Jacobs University, Bremen*)
How public policy mood cycles through opinion dynamics

15H – 15H30 Discussant: Guillaume Deffuant (*IRSTEA, LISC*)

Coffee break

16H – 16H30

Katrin Erdlenbruch (*IRSTEA, UMR G-Eau*)

The determinants of household's flood mitigation decisions in France – evidence of feedback effects from past investments*.

16H30 – 17H

Discussant: Bruno Bonté (*IRSTEA, UMR G-Eau*)

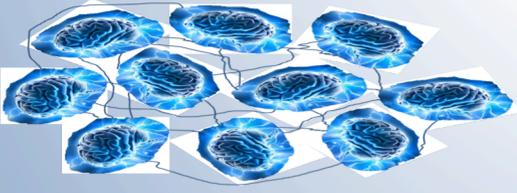
17h30- 18h

Pawel Sobkowicz (*Park Swierk, National Centre for
Nuclear Research*)

Why polarization? The role of asymmetry of emotions in opinion formation.

17H00 – 18H30

Discussant: Isabelle Alvarez (*IRSTEA, LISC*)



Speakers' abstracts & biographies

Thomas Pyszczynski

University of Colorado at Colorado Springs

(tpsychy@uccs.edu)

War and Peace: A Terror Management Theory Perspective on Terrorism and its Consequences on Targeted Populations

Although specific concrete disputes over territories, injustice, and oppression play an important role in terrorist violence, it is the meanings and psychological significance that people attach to these disputes that are directly responsible for instigating violence. My talk will focus on the implications of terror management theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986) for understanding the psychological forces that motivate ethnic, religious, and international conflict, and the consequences of the political violence that often results from such conflicts. TMT merges existential, evolutionary, cognitive, and social psychology to posit that the root of the human needs for self-esteem and meaning in life lies in the protection from existential anxiety that these psychological entities provide. From this perspective, perceiving one's group as humiliated and treated unjustly leads to violence because it undermines the emotional security provided by one's cultural worldview and self-esteem; indeed the mere existence of others with worldviews different from one's own can promote conflict because it undermines social consensus for one's beliefs and values. Research has documented the role of fear in increasing support for various forms of political violence among Iranians, Israelis, Palestinians, and Americans. However, it is not inevitable that people will respond to fear and conflict with increased support for violence. Research also shows that activating thoughts about the compassionate teachings of one's religion, the universal aspects of the human condition, the animalistic aspects of violence, and the shared threat of global climate change can direct responses to fear away from violence and toward peaceful reconciliation. Finally, recent research on the impact of fear, and for some, mere reminders of other ethnic/religious groups, in promoting support for Donald Trump in the upcoming US presidential election will also be discussed.

Tom Pyszczynski is Distinguished Professor of Psychology at the University of Colorado at Colorado Springs. He received his Ph.D in psychology from the University of Kansas in 1980. With his colleagues Jeff Greenberg of the University of Arizona and Sheldon Solomon of Skidmore College, he developed *Terror Management Theory*, which explores the role of cultural worldviews and self-esteem in managing the potential for anxiety that results from the uniquely human awareness of the inevitability of death and vulnerability. This work views intergroup conflicts as stemming from both tangible threats to a group's well-being and symbolic threats to their belief systems and ways of life posed by groups with worldviews different from their own. His research is currently focused on using terror management theory to understand political extremism, support for terrorism, responses to trauma, and anxiety-related problem. He has published over 200 articles in peer-reviewed journals. He is co-author of *Hanging on and Letting Go: Understanding the Onset, Progression, and Remission of Depression* (1994, Springer-Verlag), *In the Wake of 9/11: The Psychology of Terror* (2003, American Psychological Association Books), and *The Worm at the Core: The Role of Death in Life* (2015, Random House), and co-editor of the *Handbook of Experimental Existential Psychology* (2003; Guilford Press).

• **Jocelyn Bélanger**

jocelyn.belanger@gmail.com

New York University, Abu Dhabi

The Rise and Fall of Violent Extremism: The Science Behind Community-Based Interventions

In this talk, I discuss the role of social psychology in curbing the rise of violent extremism. First, I offer a whistle-stop tour of our most recent research on radicalization and deradicalization involving thousands of terrorists from different organizations. I argue that both processes are driven by the same motivational force: The Quest for Personal Significance ("to matter", "to be respected", "to be someone"). Then, I discussed how knowledge derived from these two lines of research can be useful to help communities prevent and become resilient to terrorism. I suggest that to be effective, prevention efforts are preferably articulated around three major axes: 1) empowering the community by providing accurate information regarding violent extremism (i.e., knowing), 2) enabling citizens to report critical information to CVE-relevant specialists (i.e., detecting), and 3) allowing the latter to deliver swift interventions to those requiring assistance within the community (i.e., intervening). Lastly, I explain how these principles guided the creation of the Center for the Prevention of Radicalization leading to Violence (CPRLV) in Montreal.

Jocelyn J. Bélanger is a professor of psychology at New York University Abu Dhabi. He earned his master's degree and doctorate in Social Psychology from the University of Maryland, College Park. His research focuses on human judgment, belief formation, and the psychology of terrorism. This interdisciplinary topic has led him to collaborate on several international large-scale projects with the National Consortium for Study of Terrorism and Responses to Terrorism (START), examining the motivational underpinnings of radicalization and deradicalization among terrorists located in the Middle-East and South-East Asia. In March 2015, he was appointed by the City of Montreal to create the first deradicalization centre in North America to tackle homegrown terrorism, the Centre for the Prevention of Radicalization Leading to Violence (CPRLV). Dr. Bélanger is the recipient of several awards such as the APA Dissertation Research Award and the Guy Bégin Award for the Best Research Paper in Social Psychology. He is also the author of numerous scientific articles published in top-tier journals of his discipline including *American Psychologist*, *Psychological Review*, and *the Journal of Personality and Social Psychology*. His research is funded by the Sciences and Humanities Research Council of Canada as well as Public Safety Canada.

• **Floriana Gargiulo**

floriana.gargiulo@gmail.com

GEMASS, Paris 4

Influence of homophily on radicalization dynamics.

Social science analyzes the large-scale behaviour of the society. On the other hand, the interactions among the individuals are studied by social psychology. The main interest of social modeling is to create a bridge between the two levels of description, observing how, starting from the microscopic description of the interactions among the agents, the global phenomena observed in the society can be reproduced. In this framework, in the last decades, many models have been proposed to analyze the evolution of the opinions in a population due to peers interactions of individuals in their social environment (where the social environment can be a static or a temporal network structure). In this seminar I will show a simulation framework where opinion dynamics models and network models enter in contact, aimed to understand the role of homophily in radicalization phenomena. Opinions and social networks can interact in different ways: opinion can shape social network structures, giving rise to social groups based on homophily, social networks can be the environment where opinion dynamics processes take place. First I will present a network generation model allowing to introduce linking preferences based on opinion similarity into a preferential attachment scenario. I will show that this procedure generates the emergence of social networks with a strongly significant community structure. Secondly I will analyse the interplay between opinion dynamics processes and the underlying social network structure. I will show that, differently from the common sense perception, a network with more marked homophily preferences, make easier the convergence of the opinions, limiting radicalization phenomena. Finally I will show the effect of an external media pressure (supporting or punishing one position) on the evolution of the opinions. I will show that, when the media pressure is strong, independently from the network structure, several opponent opinions emerge. In this case the effect of homophily is the necessary ingredient allowing the opposing ideas to cluster and to recompose a strong radical group.

Floriana Gargiulo is a CNRS researcher at the GEMASS – Paris 4. With a background in complex systems and network theory, her actual research lines can be inscribed in the emerging framework of Computational Social Science. Using a research methodology merging together modeling and data science approaches, her research interests cover a large range of social phenomena: participation phenomena, opinion formation mechanisms, social networks morphogenesis and sociology of science.

- **Jan Lorenz**

(post@janlo.de)

Jacobs University, Bremen

How public policy mood cycles through opinion dynamic

Public policy mood as measured for example by Stimson (2004) the US cycles between more liberal and more conservative. These cycles look like a relatively regular oscillation and can clearly be distinguished from random walks between liberal and conservative. Research in social psychology shows that individuals change opinions towards the opinions voiced by others but propensity to change vanishes with larger opinion discrepancy. Further on, the propensity to change also depends on individual characteristics of individuals as for example intelligence. In an agent-based model of opinion dynamics under bounded confidence, this individually heterogeneous behaviour of opinion change together with a small influx of new opinions creates a relatively large and relatively consensual opinion cluster which oscillates in the opinion space. These oscillations match the oscillations of public policy mood, and show that there seems to be an intrinsic propensity of societies to oscillate in public opinion which is triggered by local interaction of heterogeneous individuals.

Jan Lorenz is an applied mathematician and social scientist. His main interest is in all processes of continuous opinion dynamics, which he studies theoretically, experimentally and by using secondary data. He worked as the manager of experimental lab at the Center for Social Science Methodology at the University of Oldenburg. He is involved in the Methods Center of the Bremen International Graduate School of Social Sciences (BIGSSS) for agent-based modelling and experimental methods in the social sciences. He published a survey paper on continuous opinion dynamics under bounded confidence.

• **Katrin Erdlenbruch**

Katrin.erdlbruch@irstea.fr

Irstea, UMR G-Eau

The determinants of household's flood mitigation decisions in France - a case study based on R.W. Rogers' Protection Motivation Theory

In this study, we investigate the determinants of private flood mitigation in France. We conducted a survey among 331 inhabitants of two flood-prone areas in the South of France (Aude and Var department) and collected data on several topics, including individual flood mitigation, risk perception, risk experience, and sociodemographic characteristics. We estimate discrete choice models to explain either the presence of precautionary measures implemented by the household, or the intention to take such measures. We test the robustness of R.W. Rogers' Protection Motivation Theory in France, discuss its scope and investigate the existence of feedback effects from past investments on people's protection intentions. Our results confirm that the Protection Motivation Theory is a relevant framework to describe the mechanisms of private flood mitigation in France, highlighting in particular the importance of threat appraisal, threat experience appraisal, and coping appraisal. Some sociodemographic features are also important to explain private flood mitigation: respondents with at least a high school diploma, those who live in municipalities with more than 10000 inhabitants, those who lived in the Var department and home-owners are more likely to consider taking precautionary measures than the others. Our results also give evidence for feedback effects as they suggest that implementing precautionary measures reduces perceptions of the risk of flooding. The existence of these feedback effects implies that intended measures, rather than implemented ones, should be examined to explore further the determinants of private flood mitigation. (This work is based on a paper co-authored by: Claire Richert [Phd Student, Irstea, UMR G-EAU], Katrin Erdlenbruch [DR Irstea, UMR G-EAU], Charles Figuières [DR Inra, UMR Lameta]).

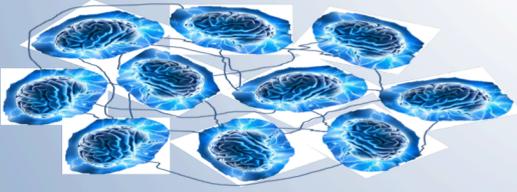
Dr. Katrin Erdlenbruch holds a MSc in environmental economics from University College London, and a PhD in economics from the University of Montpellier. She is a senior research fellow at the French institute of science and technology for the environment and agriculture (IRSTEA), where she works in a joint research unit (UMR G-EAU), which is specialized in water management. Dr. Katrin Erdlenbruch deals with natural resource economics and the study of water related risks (floods, droughts and water pollution). In particular, she is interested in the analysis of individual behaviour in the long-run and under uncertainty. She has competences in dynamic modelling and statistical analysis. The presented current study is part of a larger project on the impact of large flood events on French territories, with a focus on the nature of post-event adaptation (RDT Retina project, lead by Dr. Frederic Grelot). Within this project, and in cooperation with Claire Richert and Dr. Charles Figuières, Dr. Katrin Erdlenbruch leads a series of investigations on the mechanisms of households' adaptation to floods.

Park Świerk at the National Centre for Nuclear Research

Why polarization? The role of asymmetry of emotions in opinion formation.

Modern day democratic societies are characterised, in a growing number of situations with seemingly unbridgeable splits of opinion. Polarization covers not only political views, but also issues related to well documented scientific topics: climate change, GMO, risks associated with various technologies (such as vaccination), etc. While there are multiple psychological and sociological explanations, the very richness of the literature and research methodologies fosters certain disconnect and a lack of interdisciplinarity in a multidisciplinary topic. Such link may be provided by Agent Based Models (ABMs). Unfortunately, most ABMs used to describe opinion dynamics disregard emotional aspects, in particular the negativity bias and the asymmetry between emotions such as fear, anger, anxiety, disgust and joy, sympathy or love. The asymmetry involves the ease of arousing these emotions, the capacity to communicate them and the temporal stability of the relevant excited states. To meaningfully model highly polarized situations (such as the ones listed above), one has to take into account not only the dominant role of affect heuristics over cognitive processing, but also the differences in the individual emotions and the associated contagion processes. The recently documented asymmetry between negative and positive emotions and the resulting differences in the spread in social media indicate the importance of including them in the theoretical models.

Pawel Sobkowicz is Director of Science and Technology Park Świerk at the National Center for Nuclear Research. He has PhD in theoretical physics, and between 1982 and 1993 worked at the Institute of Physics, Polish Academy of Sciences, focusing on solid state theory. Since 1993 he has left academic career and has been a member of management teams of several high-tech companies, both international (Silicon Graphics Inc. Network Appliance Inc., Fujitsu-Siemens Corporation, Bull) and Polish (ATM S.A., Optimus S.A., Solidex S.A.). His tasks included sales management, marketing and project management. Since June 2012 he has joined the National Center for Nuclear Research with the task of managing the technology transfer processes and management of commercialization efforts. In 2009 he returned to active research as a "citizen scientist", without formal affiliation and financial support. The current research interests include Agent Based Models of various social systems: opinion and emotion dynamics, political polarization effects, studies of effects of funding on scientific innovation and optimization of organizational effectiveness. Despite obvious disadvantages of working outside "organized science", in February 2016 he has obtained habilitation degree in physics, becoming a second "citizen scientist" in Poland to achieve this.



Organization staff

“From one mind to many: Collective threat and collective resilience” workshop was organized by Serge Guimond (EHESS-Cadis), Michel Streith, Armelle Nugier (Université Blaise Pascal), Sylvie Huet and Guillaume Deffuant (IRSTEA, Lisc) with the help of Kamilla Khamzina (Université Blaise Pascal). This project has received a financial support of the CNRS (Project IM₃CP-“Defi S₂ C₃)



