Proposition de sujet d'alternance recherche 1A
2026-27

Laboratoire :	AMSE		
Titre du sujet :	Leaving with complexity		
Encadrant * (s) :	Premier tuteur	Second tuteur	Troisième tuteur
Nom :	Luchini	Pintus	Teschl
Prénom :	Stéphane	Patrick	Miriam
Qualité ** :	CR	PR	McF
Localisation :	AMSE, IBD	AMSE, IBD	AMSE, IBD
Coordonnées *(e-mail/tel)*	Stephane.luchini@univ-amu.fr	papintus@gmail.com	Miriam.teschl@ehess.fr
Déplacements possibles * :**			

** si vous avez déjà accepté un alternant recherche*
*** un co-encadrement est possible.*
**** l'encadrement devra être assuré de préférence par au moins un permanent du laboratoire, au minimum titulaire d'un Doctorat.*
***** au cas ou dans le cadre de son travail l'alternant serait amené à se déplacer vers un second laboratoire.*

Descriptif du sujet et de la mission :

What can we do and what do we want to know when we are faced with complex situations? How can we make decisions in situations when predictions are out of reach, (at least without making a number of unverifiable assumptions) or when one decision may lead to a number of follow-up events of which we may not even be aware? Over the last few years, we have embarked on a journey of complexity, how we live with it, if and how we perceive it and what tools (including cognitive ones) we have to deal with it. Our research involves interdisciplinary conceptual and experimental work with neuro- and social scientists. We tested some ideas experimentally in the lab with animals and humans, and applied some of our newly gained insights to real world complex challenges such as Covid-19 and sovereign debt.

Our ongoing research team includes and included several students from Ecole Centrale Marseille who did their research internship with us. Their contributions range from literature reviews across the different disciplines to gain a more in-depth historical and conceptual understanding of the questions we

are dealing with, exploring existing computer games that deal with complex phenomena from an almost anthropological "skin-in-the-game" perspective, coding computer programs to set up experiments with animals (notably rats) as well as to experiments with humans to test some particular cognitive abilities, and exploring new reinforcement learning algorithms and toy neural networks.

Many questions remain and so there is much more to explore. That is why we are happy to work with new students who will become full members of our research group. We are proposing some questions, without necessarily knowing what will come out of it at the end. We propose to embark together on a journey of exploration in different directions, using different tools of a wide array of disciplines, because complexity is certainly not limited to the economic domain only.

Validation pour mise en ligne ECM : 