



# Swiss Center for Affective Sciences

## LECTURE SERIES

**Tuesday,  
6th October 2020  
12:15 -13:15**

**Campus Biotech**  
Via Zoom

Mandatory registration:

<https://unige.zoom.us/j/6181818181>  
[gister/tJArfuCgrj4qHdIUQy9Ys](https://unige.zoom.us/j/6181818181)  
[CTpTkr15rk\\_l2A](https://unige.zoom.us/j/6181818181)

## Computational Affective Science: Collective Emotions in the Digital Traces After a Terrorist Attack

**Prof. David Garcia**

(Complexity Science Hub Vienna & Graz University of Technology)

The wealth of data generated by our digital society, when combined with computational methods like agent-based modeling and natural language understanding, provides a new window to study human affect at new scales and resolutions. I present an overview of this new research line of Computational Affective Science and illustrate it through the analysis of collective emotions in social media after a collective trauma. Although exchanges of emotions in social media resemble simple emotional venting, Durkheim's theory of collective effervescence postulates that these collective emotions lead to higher levels of solidarity in the affected community. We present the first large-scale test of this theory through the analysis of digital traces of 62,114 Twitter users after the Paris terrorist attacks of November 2015. We found a collective negative emotional response followed by a marked long-term increase in the use of lexical indicators related to solidarity. Expressions of social processes, prosocial behavior, and positive affect were higher in the months after the attacks for the individuals who participated to a higher degree in the collective emotion. Our findings support the conclusion that collective emotions after a disaster are associated with higher solidarity, revealing the social resilience of a community through its digital traces in social media.

Swiss Doctoral School in Affective Sciences

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