The aim of the CARTE research team is to take into account adversity in computations, which is implied by actors whose behaviors are unknown or unclear. We call this notion adversary computation. The project combines two approaches, and we think that their combination will be fruitful. The first one is the analysis of the behavior of a wide-scale system, using tools coming from Continuous Computation Theory. The second approach is to build defenses with tools coming rather from logic, rewriting and, more generally, from Programming Theory. The activities of the CARTE team are organized around two research actions: Computer Virology. Computation over Continuous Structures.

Axes de recherche
There are three main research directions: 1) Computer virology: We study model of viruses, self-modifying programs, and heuristic to detect malware 2) Model of computation over reals and dynamical systems 3) Implicit computational complexity

Relations industrielles et internationales
We have relationships with Torino (EA Crystal), with Alexandria, with Lisboa (EA Computr) and Montreal (Ecole polytechnique).