**H. Cooperation in networked populations**

Following the previous challenge of how cooperation emerges in large populations, here you are invited to assess the role of population structure in the final outcome of cooperation and fairness. First, you can find projects where the goal is to explore the consequences of placing these players in a two-dimensional spatial array, mimicking the spatially embedded constraints commonly find in real-world settings. Secondly, you are invited to evaluate the impact of heterogeneity, in which some individuals have many more contacts than others. This fact contrasts with the traditional well-mixed setting used in analytical studies of evolutionary game dynamics where all individuals are equally likely to interact.

**53.** Collective action in heterogeneous political networks. Analyze the impact of structural diversity in the evolution of cooperative behavior in political networks. Check Fig. 3 in Ref. [73] and extend the methodology to other classes of N-person games (N-person Snowdrift-Game and N-person Stag-hunt game). [Involves computer simulations]

73. Santos, F.C. and J.M. Pacheco, *Risk of collective failure provides an escape from the tragedy of the commons.* Proc Natl Acad Sci USA, 2011. **108**(26): p. 10421-10425 Available from: <http://web.ist.utl.pt/franciscocsantos/MyArticles/FCSantos-JMPacheco-PNAS2011.pdf>.