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**Feng Fu\*** (fufeng@gmail.com) and **Xingru Chen**. *Evolutionary game theory with applications to public health problems*. Preliminary report.

Evolutionary game theory has become a general approach to studying a wide range of biological and social problems. In particular, it has proved useful in understanding human strategic behavior in social dilemma situations where people can cooperate for the common good. Notably, the tragedy of the commons can also arise as a result of free-riding in the important context of public health problems, such as vaccine compliance and antibiotics overuse. Understanding them through the lens of evolutionary game theory is a new promising direction. (Received February 10, 2018)