# Let start with something good?!

The first paper, that I want to write an abstract about, is called [Grandmaster level in StarCraft II using multi-agent reinforcement learning](https://www.nature.com/articles/s41586-019-1724-z.epdf?author_access_token=lZH3nqPYtWJXfDA10W0CNNRgN0jAjWel9jnR3ZoTv0PSZcPzJFGNAZhOlk4deBCKzKm70KfinloafEF1bCCXL6IIHHgKaDkaTkBcTEv7aT-wqDoG1VeO9-wO3GEoAMF9bAOt7mJ0RWQnRVMbyfgH9A%3D%3D). The name looks too long, and we can call this paper, for short, AlphaStar. This incredible method (I don’t want to call it “algorithm” because it sounds less than the technique is, for me) mixes with mastery techniques as neural networks, imitation learning, reinforcement learning and multi-agent learning, and I call this method incredible because it won professional players in the game Starcraft 2, and with the same limitations that humans have, the method archive the grandmaster position in the official rank of players.

## Learning with humans

The first step of the algorithm