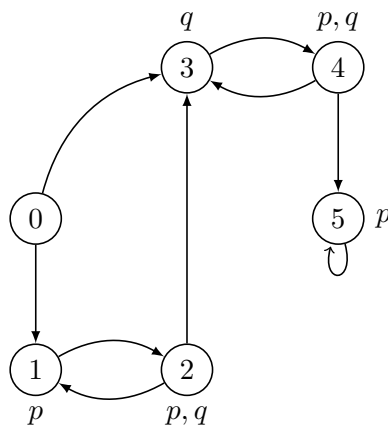# Homework 4

To hand in on October 21st at the beginning of the exercise session, or by mail (before 14:00) at `leroux@lsv.fr`.

Answers can be written in french or in english.

We give the following Kripke structure:

and the following CTL formula:

$$\phi = \mathsf{E}((\mathsf{AF}\,\mathsf{EG}\,p)\ \mathsf{U}\ (\mathsf{AG}\,\mathsf{EX}\,q)) \vee \mathsf{A}((\mathsf{EX}\,\mathsf{EG}\,p)\ \mathsf{U}\ q)$$

For each state sub-formula ψ of ϕ, compute the set of states satisfying ψ.