FIG. 1. A typical flat tire. Can the car drive so fast such that the rim is lifted from the ground?

Fast enough to overcome a flat

1. How fast should a car with four flat tires, but a capable engine, drive such that the wheel rim will not lie on the ground, and the tires will appear as if they are partially inflated?

   Some parameters: Total wheel radius: $r_w = 0.25m$, radius of the rim: $r_a = 0.15m$, mass of the tire (the rubbary part): $m_t = 10kg$, mass of the car: $m = 1000kg$.

2. A second question raised in our meeting regarded the jet of air expelled from the valve of a pumped bike tire. Can you model somehow how far the jet would go if it originates in a hole of diameter of $1mm$, and tube pressure of $5Atm$?