

Data for the Example Studied Numerically

$$\ddot{x} + 2\dot{x} = u,$$

$$\ddot{y} + 0.2\dot{y} + y = v,$$

$$x, y \in \mathbb{R}^2, \quad u \in P, \quad v \in Q,$$

$$P = \left\{ u \in \mathbb{R}^2 : \frac{u_1^2}{0.8^2} + \frac{u_2^2}{0.4^2} \leq 1 \right\},$$

$$Q = \left\{ v \in \mathbb{R}^2 : \frac{v_1^2}{1.5^2} + \frac{v_2^2}{1.05^2} \leq 1 \right\},$$

the terminal set M after passage to the equivalent game is a circle with the radius c and the center at the origin.