Formula file: `Problem10_label59_true-unreach-call.c_69.smt2`
Two asserts present: $\phi, \psi$
Assert $\phi$:

$$\phi: \quad \phi_1 \vee \phi_2 \tag{1}$$

$$\phi_1: \quad 3 \leq x \wedge \exists u, w\, (23 \leq w \wedge (u \ mod\ 299993) \leq v + 300007 \wedge 0 \leq u \wedge 5w + 517989 \leq u) \tag{2}$$

$$\phi_2: \quad 3 \leq x \wedge \exists w, y\, ((y \ mod\ 299993) \leq v + 600000 \wedge 23 \leq w \wedge (y \ mod\ 299993) \neq 0 \wedge y < 0 \wedge 5w + 517989 \leq u) \tag{3}$$

Assert $\psi$:

$$\psi: \quad \psi_1 \vee \psi_2 \tag{4}$$

$$\psi_1: \quad 3 \leq x \wedge \exists y\, (z \leq y \wedge (y \ mod\ 299993) \leq v + 600000 \wedge (y \ mod\ 299993) \neq 0 \wedge y < 0) \tag{5}$$

$$\psi_2: \quad 3 \leq x \wedge \exists y \left( \underbrace{z \leq y \wedge 0 \leq y \wedge (y \ mod\ 299993) \leq v + 300007}_{\text{Fragment for the experimentation}} \right) \tag{6}$$

$$\alpha: \quad z \leq y \wedge 0 \leq y \wedge \underbrace{(y \ mod\ 299993) \leq v + 300007}_{\text{Existential quantif.}} \tag{7}$$

$$\rightsquigarrow \exists m \left( \underbrace{z \leq y \wedge 0 \leq y \wedge m \leq v + 300007}_{\text{Linear}} \wedge \underbrace{y \equiv_{299993} m}_{\text{Counter}} \right) \tag{8}$$

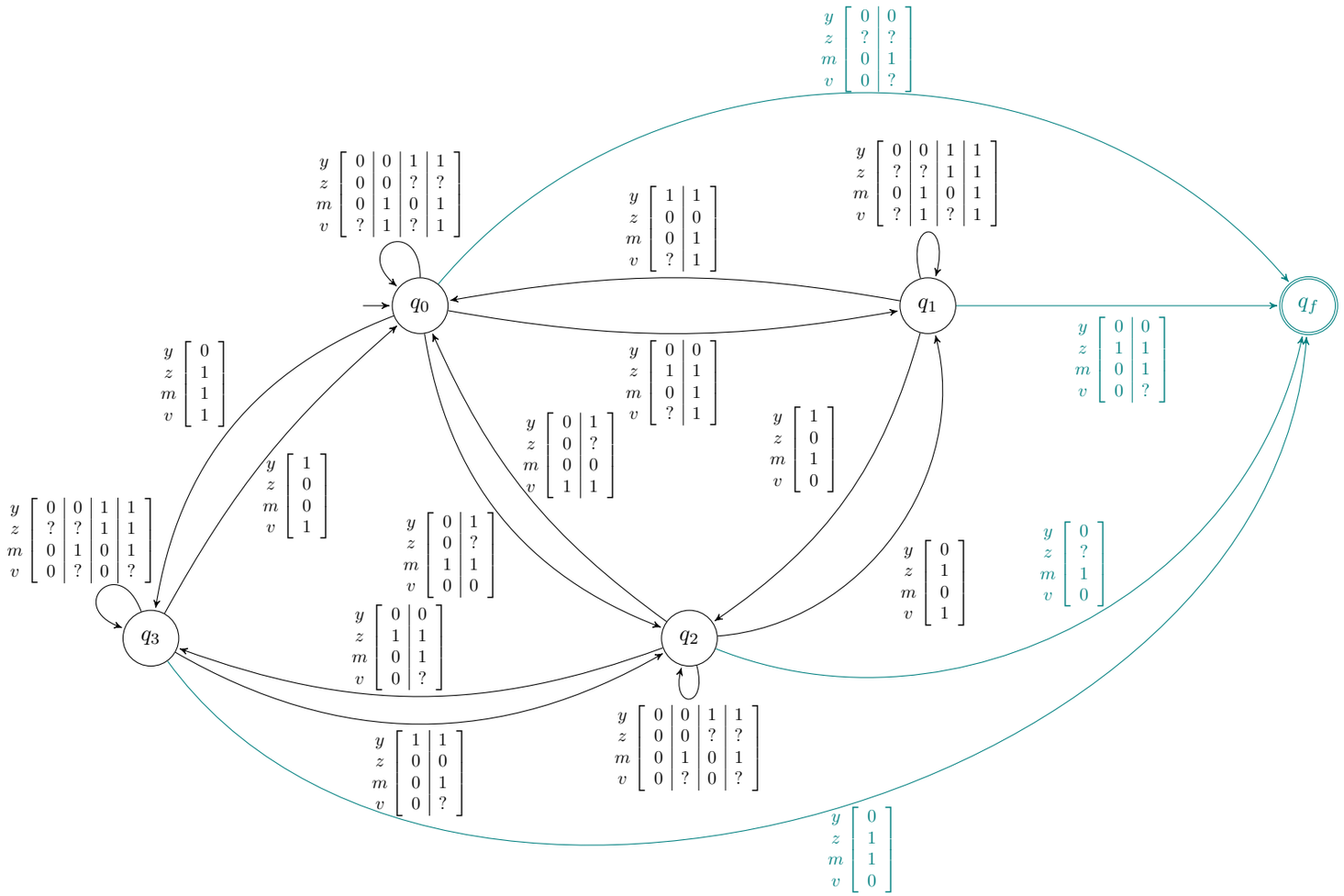


Figure 1: SCC of $A_{linear}$