

$$\mu_0 := 0.012277471 \quad \mu_1 := 1 - \mu_0$$

$$D(t, y) := \begin{cases} r1 := (y_1 + \mu_0)^2 + (y_2)^2 \\ r1 := r1 \cdot \sqrt{r1} \\ r2 := (y_1 - \mu_1)^2 + (y_2)^2 \\ r2 := r2 \cdot \sqrt{r2} \\ y3 := y_1 + 2 \cdot y_4 - \frac{\mu_1}{r1} \cdot (y_1 + \mu_0) - \frac{\mu_0}{r2} \cdot (y_1 - \mu_1) \\ y4 := y_2 \cdot \left(1 - \frac{\mu_1}{r1} - \frac{\mu_0}{r2}\right) - 2 \cdot y_3 \\ \text{stack}(y_3, y_4, y3, y4) \end{cases}$$

Min step

Max step

Tolerance

Method: (1, 2, 3)

$$hmn := 10^{-4}$$

$$hmx := 2$$

$$eps := 0.01$$

$$nm := 3$$

$$N := 85$$

$$tmin := 0 \quad tmax := 17.1$$

$$x_0 := \text{stack}(0.994, 0, 0, -2.00158510637908252240537862224)$$

$$res := \text{manzhuk}(x_0, tmin, tmax, N, D)$$

Error code

$$ier = 0$$

$$\text{rows}(res) = 86$$

$$p1 := res[1..N] \begin{bmatrix} 1 \\ 2 \end{bmatrix}$$

$$p2 := res[1..N] \begin{bmatrix} 1 \\ 3 \end{bmatrix}$$

$$p3 := res[1..N] \begin{bmatrix} 2 \\ 3 \end{bmatrix}$$

