Draghilev's method. Examples. Viacheslav N. Mezentsev, viacheslavmezentsev@ya.ru

Draghilev's method

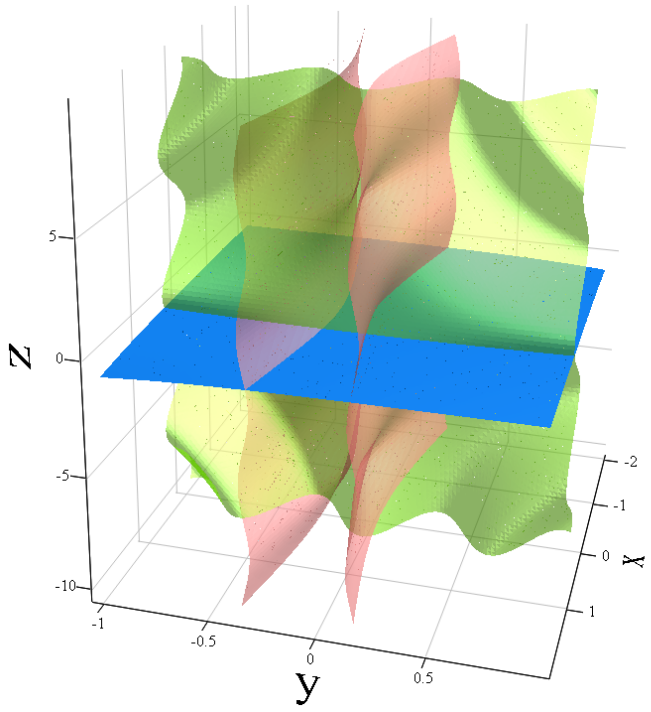
$$f1(x,y,z) := 3\cdot x - \cos(y\cdot z) - \frac{1}{2}$$

$$f2(x,y,z) := x^2 - 81\cdot(y+0.1)^2 + \sin(z) + 1.06$$

$$f3(x,y,z) := 20\cdot z + e^{-x\cdot y} + \frac{1}{3}\cdot(-3+10\cdot\pi)$$

$$F(X) := \left\| \begin{bmatrix} x := X_1 & y := X_2 & z := X_3 \end{bmatrix} \right\| \begin{bmatrix} f1(x,y,z) \\ f2(x,y,z) \\ f3(x,y,z) \end{bmatrix}$$

appVersion(4) = "0.99.6858.3232"



$X_0 := \text{stack}(0.489, 0.5, -0.513)$ $t_{min} := 0$ $t_{max} := 0.0008$ $N := 50$

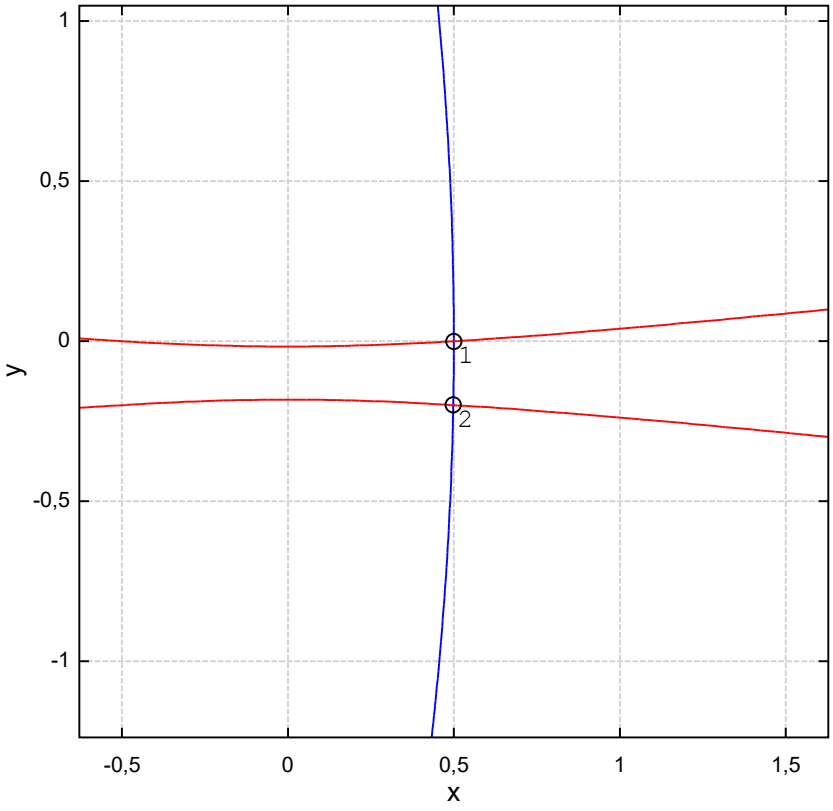
$result := Draghilev(F(X), X_0, t_{min}, t_{max}, N)$

$k := \text{rows}(result)$ $k = 2$

$XY := result_{[1..k][1..2]}$

$XYZ := result_{[1..k][1..3]}$

for $m \in [1..k]$ for $m \in [1..k]$
$o\_O_m := "o"$ $o\_\#_m := \text{num2str}(m)$



$$XYZ = \begin{bmatrix} 0.5 & -0.0009 & -0.5236 \\ 0.4982 & -0.1988 & -0.5288 \end{bmatrix}$$