

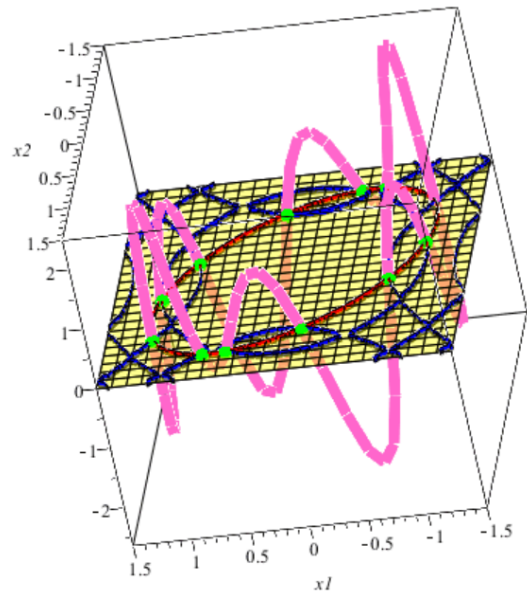
— Draghilev's method

$$f1(x, y) := x^2 - y \cdot x + y^2 - 1$$

$$f2(x, y) := \sin(5 \cdot x^2) + \sin(4 \cdot y^2)$$

$$F(X) := \begin{bmatrix} x := X_1 & y := X_2 \\ f1(x, y) \\ f2(x, y) \end{bmatrix}$$

appVersion(4) = "0.99.6858.3232"



$X_0 := \text{stack}(0, 1)$

$t_{min} := 0$

$t_{max} := 1.6 \cdot \pi$

$N := 100$

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

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

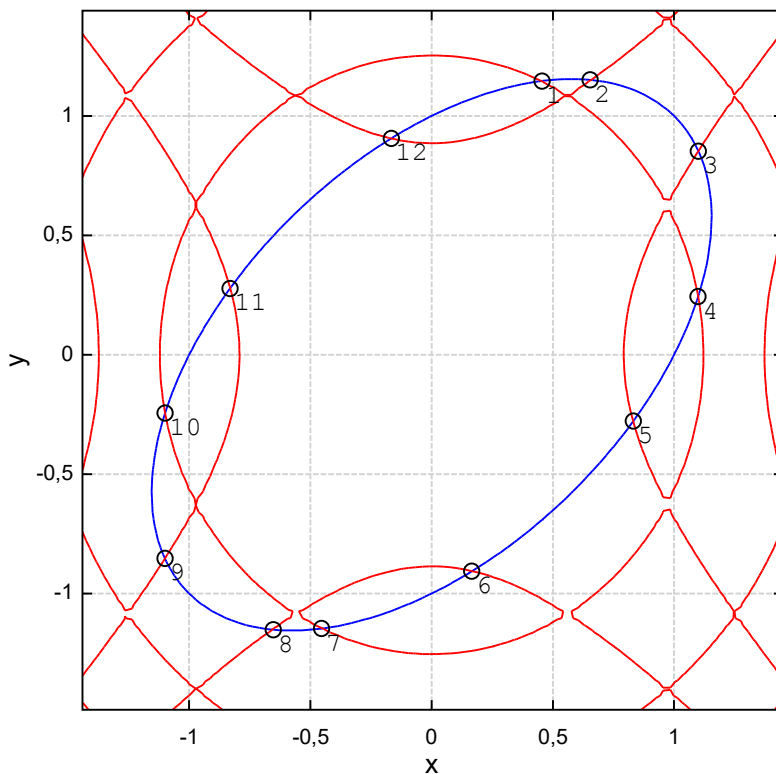
$k = 12$

$XY := \text{result}[1..k][1..2]$

for $m \in [1..k]$ for $m \in [1..k]$

$o_O_m := "o"$

$o_ \#_m := \text{num2str}(m)$



$$XY = \begin{bmatrix} 0.4552 & 1.1463 \\ 0.6541 & 1.1508 \\ 1.1002 & 0.8526 \\ 1.0989 & 0.244 \\ 0.8316 & -0.2772 \\ 0.1656 & -0.9063 \\ -0.4547 & -1.1462 \\ -0.6531 & -1.1508 \\ -1.1002 & -0.8529 \\ -1.099 & -0.2439 \\ -0.8312 & 0.2782 \\ -0.1663 & 0.9061 \end{bmatrix}$$

$$\begin{cases} f1(x, y) \\ f2(x, y) \\ \text{augment}(XY, o_O) \\ \text{augment}(XY, o_ \#) \end{cases}$$