

SCHWEFEL

Desc	Schwefel's function has a local minimum in the point where one element is 302.5232 and the others are 420.9687. It is rather far from the global minimum, so there is a chance that an algorithm will miss the global minimum.
Source	http://qai.narod.ru/GA/testfunc.html
Problem formulation	$\begin{cases} \min_{x \in \mathbb{R}^N} (418.9829N + \sum_{i=1}^N (-x_i \sin(\sqrt{ x_i })) \\ -500 \leq x_i \leq 500 \end{cases}$
Known minima	$x_i = 420.9687$ $f(x) = 0$
Parameters	PP - (1*1) scalar – number of input dimensions (N)
Picture	<p>A 3D surface plot of Schwefel's function. The plot shows a highly oscillatory landscape with many local minima. The vertical axis is labeled 'y' and ranges from 0 to 1800. The horizontal axes are labeled 'x1' and 'x2', both ranging from -500 to 500. A color bar on the right indicates function values from 200 (blue) to 1600 (red). The plot is titled 'SOP:schwefel'.</p>