Fonction issue de la transformée de Fourier discrète appliquée à la suite de points dessinée.

On a rangé les coefficients du plus grand au plus petit (en module).

$$f(t) = 400.49 + 299.87i + (102 - 113i)\mathbf{e}^{-it} + (-20.6 - 51.1i)\mathbf{e}^{it} + (-4.8 - 28.6i)\mathbf{e}^{-2it} + (13.5 - 24.7i)\mathbf{e}^{2it} + (6.3 - 7.7i)\mathbf{e}^{3it} + (-9.21 + 3.63i)\mathbf{e}^{-3it} + (-2.52 - 6.03i)\mathbf{e}^{-5it} + (-1.17 - 4.45i)\mathbf{e}^{5it} + (-0.69 - 3.64i)\mathbf{e}^{-12it} + (-2.49 - 2.53i)\mathbf{e}^{4it} + (2.16 + 2.22i)\mathbf{e}^{12it} + (1.56 - 2.67i)\mathbf{e}^{-9it} + (-1.79 - 2.28i)\mathbf{e}^{11it} + (-0.412 - 2.85i)\mathbf{e}^{-4it} + (2.3 - 1.72i)\mathbf{e}^{-7it} + (-0.725 - 2.72i)\mathbf{e}^{6it} + (2.13 - 1.77i)\mathbf{e}^{-10it} + (0.313 + 2.6i)\mathbf{e}^{-13it} + (0.397 + 2.3i)\mathbf{e}^{10it} + (0.504 - 1.85i)\mathbf{e}^{-8it} + (-0.362 - 1.4i)\mathbf{e}^{-15it} + (0.811 - 1.05i)\mathbf{e}^{13it} + (0.435 + 1.21i)\mathbf{e}^{-11it} + (-0.699 - 0.931i)\mathbf{e}^{17it} + (-0.562 - 0.961i)\mathbf{e}^{8it} + (0.445 - 0.885i)\mathbf{e}^{-6it} + (-0.0273 + 0.962i)\mathbf{e}^{-20it} + (-0.564 - 0.742i)\mathbf{e}^{15it} + (0.529 - 0.679i)\mathbf{e}^{-24it} + (-0.827 - 0.235i)\mathbf{e}^{18it} + (0.034 + 0.83i)\mathbf{e}^{19it} + (-0.311 - 0.671i)\mathbf{e}^{-14it} + (-0.714 + 0.188i)\mathbf{e}^{-25it} + (-0.308 - 0.668i)\mathbf{e}^{-16it} + (0.706 - 0.18i)\mathbf{e}^{-19it} + (-0.557 - 0.412i)\mathbf{e}^{7it} + (0.633 - 0.2i)\mathbf{e}^{23it} + (0.307 - 0.569i)\mathbf{e}^{26it} + (0.613 + 0.173i)\mathbf{e}^{-26it} + (-0.049 + 0.619i)\mathbf{e}^{14it} + (0.34 - 0.514i)\mathbf{e}^{-27it} + (-0.367 + 0.445i)\mathbf{e}^{-29it} + (0.506 - 0.215i)\mathbf{e}^{35it} + (0.529 + 0.0845i)\mathbf{e}^{-21it} + (0.0978 + 0.502i)\mathbf{e}^{31it} + (0.493 + 0.0717i)\mathbf{e}^{-23it} + (0.365 - 0.331i)\mathbf{e}^{49it} + (0.314 + 0.38i)\mathbf{e}^{-30it} + (-0.00976 - 0.492i)\mathbf{e}^{9it}$$