

# Quantum Monotone Local Search.

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April 24, 2023

**Introduction.** bla bla bla

$$c = 8$$

$$f(x) = (2 - (1/c))^x$$

$$g(x) = (2 - (1/c)^2)^{(x/2)}$$

The second derivative of  $f$  is

$$\frac{d^2}{dx^2} \left( \frac{15}{8} \right)^x = \left( \frac{15}{8} \right)^x \log \left( \frac{15}{8} \right)^2.$$

Here's a plot of  $f$  from  $-1$  to  $1$ :

