Reverse mode AD is best suited for

$F: \mathbf{R}^n \to \mathbf{R}$

Forward mode AD is best suited for

$$G\colon \mathbf{R}\to \mathbf{R}^m$$

just two possible (extreme) ways of recursing through the chain rule.
▶ For n > 1 and m > 1 there is a golden

mean, but finding the optimal way is

probably an NP-hard problem.

Forward and reverse mode represents



