Fourth order Pade scheme

▶ Inner grid points:

$$f_i' + \frac{1}{4}(f_{i-1}' + f_{i+1}') = \frac{3}{4}\frac{f_{i+1} - f_{i-1}}{dx}$$

▶ Boundary points:

$$f_1' + 2f_2' = \frac{-5f_1 + 4f_2 + f_3}{dx}$$

$$f_n' + 2f_{n-1}' = \frac{5f_n - 4f_{n-2} - f_{n-1}}{dx}$$