

## Some definitions

$$c_0 = \frac{p}{T^4}$$

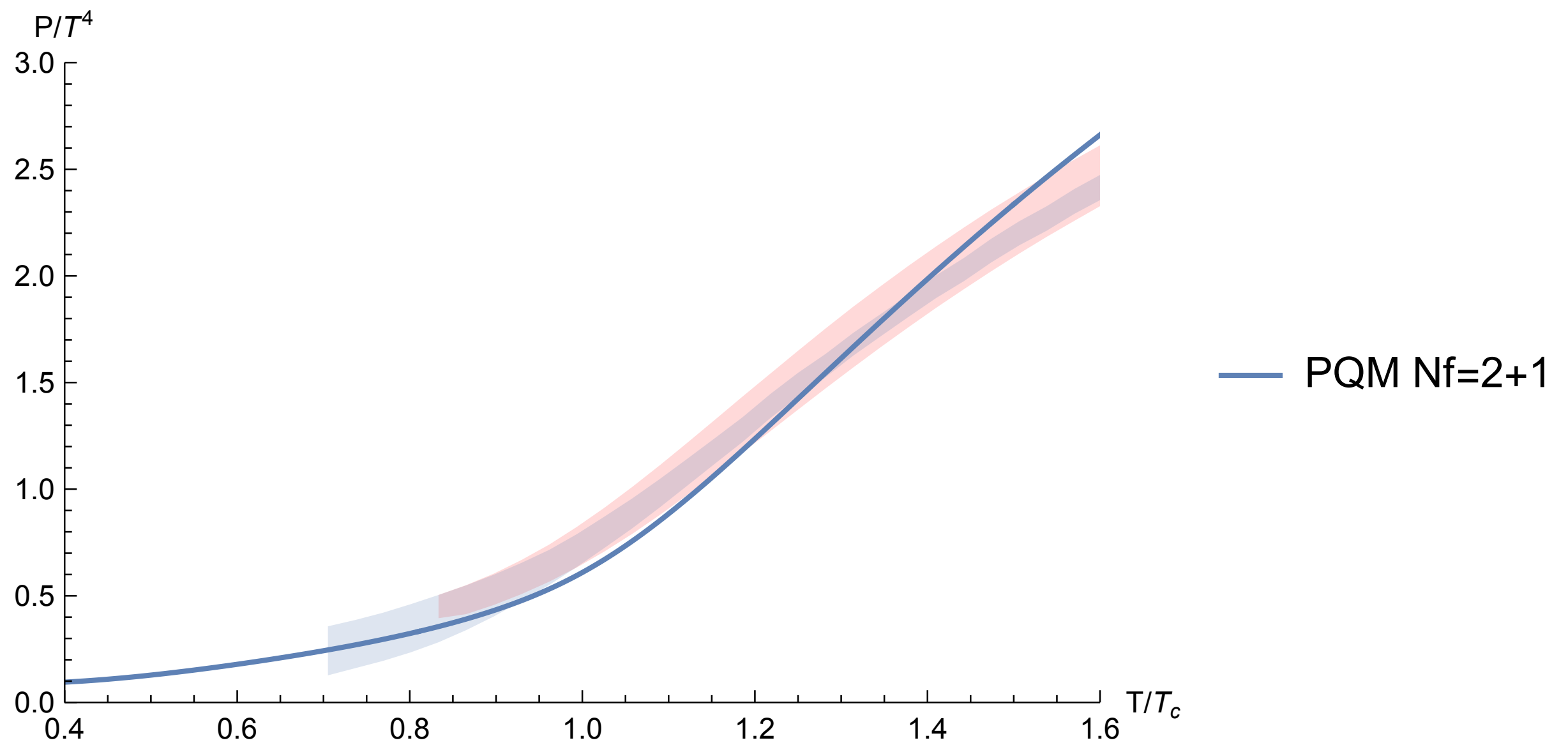
$$c_1 = \frac{\partial}{\partial T} \frac{p}{T^4} = -4 \frac{p}{T^5} + \frac{p'(T)}{T^4}$$

$$c_2 = \frac{\partial^2}{\partial T^2} \frac{p}{T^4} = 20 \frac{p}{T^6} - 8 \frac{p'(T)}{T^5} + \frac{p''(T)}{T^4}$$

$$c_3 = \frac{\partial^3}{\partial T^3} \frac{p}{T^4} = -120 \frac{p}{T^7} + 60 \frac{p'(T)}{T^6} - 12 \frac{p''(T)}{T^5} + \frac{p^{(3)}(T)}{T^4}$$

$$c_4 = \frac{\partial^4}{\partial T^4} \frac{p}{T^4} = 840 \frac{p}{T^8} - 480 \frac{p'(T)}{T^7} + 120 \frac{p''(T)}{T^6} - 16 \frac{p^{(3)}(T)}{T^5} + \frac{p^{(4)}(T)}{T^4}$$

$c_0$



$c_s^2$

