

## Local Scale Inv. :

$$t > s \begin{cases} R_{x=0}(t,s) = p_0(t-s)^{-\frac{x_1+x_2}{z}} \left(\frac{t}{s}\right)^{\frac{x_2-x_1}{z}} \\ R_x(t,s) = R_{x=0}(t,s) \Phi(|x|(t-s)^{-1/z}) \end{cases}$$

$$\Rightarrow R_{q=0}(t,s) = A_R(t-s)^{\dots} \left(\frac{t}{s}\right)^{\dots} \cdot \underset{\text{FR}(v)}{\underbrace{1}} \quad \text{RG}$$

Def.  $\Lambda(t,s) \equiv \frac{\Omega R_{q=0}(t,s)}{\partial_s C_{q=0}(t,s)}$       analogous to  $X_x(t,s)$

$$\Rightarrow \lim_{\substack{t \rightarrow \infty \\ s \text{ fix}}} \Lambda(t,s) = X^\infty$$

2loop results:  $\epsilon \equiv 4-d > 0$

$$F_R(v) = 1 + \epsilon^2 \frac{3(N+2)}{8(N+8)^2} f_R(v) + O(\epsilon^3)$$

$$\partial_s C_{q=0}(t,s) = \dots$$

$$(2X^\infty)^{-1} = 1 + \frac{N+2}{4(N+8)} \epsilon + \frac{N+2}{(N+8)^2} \left[ \frac{N+2}{8} + \frac{3(3N+14)}{4(N+8)} - 0.0415 + c \right] \epsilon^2 + \dots$$