

$$(1) [(s+m) y(x, s)]_{s=-m} \text{ in M\&W}$$

is (up to a const)  $y_-$  in our notation, while  $y$  is  $y_+$

(2) Consider two solutions for  $m^2 = \frac{1}{4}$

$$y_+ = x^{1/2} (C_0^{(+)} + C_1^{(+)} x + C_2^{(+)} x^2 + \dots)$$

$$y_- = x^{-1/2} (C_0^{(-)} + C_1^{(-)} x + C_2^{(-)} x^2 + \dots)$$

substitution into Bessel's Equ. gives

$$+ (12 C_3^{(+)} + C_1^{(+)}) x^2 + (6 C_2^{(+)} + C_0^{(+)}) x + 2 C_1^{(+)} = 0$$

$\Rightarrow C_1^{(+)}$  and all  $C_{2n+1}^{(+)}$  are zero

$$(12 C_4^{(-)} + C_2^{(-)}) x^2 + (6 C_3^{(-)} + C_1^{(-)}) x + (2 C_2^{(-)} + C_0^{(-)}) = 0$$

$\Rightarrow$  odd series in  $y_-$  coincides with even <sup>(the only)</sup> series in  $y_+$  and can be dropped <sub>one</sub>





