

Let

$$g(n) = 2\pi e^{1+W\left(\frac{8n+1}{8e}\right)} \quad (1)$$

be the approximate value of the  $n$ -th Gram point. Now define

$$G(n) = \frac{Z(g(n))}{|Z(g(n))|} + \frac{Z(g(n+1))}{|Z(g(n+1))|} \quad (2)$$

then the function defined by

$$B(n) = \frac{1}{4}G(n-1)G(n) \quad (3)$$

takes on the value 1 when  $n$  is a “bad” Gram point for which  $(-1)^{n+1}Z(g(n)) > 0$  and the value 0 when it is a “good” Gram point  $(-1)^{n+1}Z(g(n)) < 0$ .

$$(4)$$