1146-26-102   **John T Risher*** (`risherjt@email.sc.edu`) and **Wei-Kai Lai**. *Nesbitt Type Inequalities Using Power Series Approach.* Preliminary report.

After Nesbitt introduced his famous inequality: $\frac{a}{b+c} + \frac{b}{c+a} + \frac{c}{a+b} \geq \frac{3}{2}$ for positive a, b, and c at 1903, it has been applied in many Mathematical Olympiad problems and used in many cases to improve upper or lower bounds of functions. Among its many proofs, one was introduced by Mortici at 2012, using power series approach. Adopting this new approach, we developed several new Nesbitt type inequalities. In this talk, we will introduce these new developed inequalities along with our proofs. (Received January 11, 2019)