George O. Golightly* (glght9@aol.com), 735 Loop 142, Jacksonville, TX 75766. Iterated Remainders in the Alternating Harmonic Series.

If A is a summable sequence, the sequence of remainders in the series summing A is denoted by r(A). In case r(A) is, itself, summable, the sequence r(r(A)) is denoted by [r^2](A). If A is the alternating harmonic series, each of A, r(A), [r^2](A), . . . is alternating, decreasing in magnitude, and has zero limit. Hence, by the Alternating Series Theorem, each of these sequences is summable. Here, we present a simple formula for the sum of these iterated remainders. It is remarked that although the sum of A, r(A)(1), is Ln(2), an irrational number, the sum [[r^n](A)](1) of all the terms in the sequence [r^n](A), n=2,3,4,..., is rational. (Received May 01, 2014)