

PROBLEM OF THE MONTH #2

FEBRUARY 2017

Directions: Write a complete solution to the problem below showing all work. Your paper must have your name, W#, and Southeastern email address. Solutions are to be placed in the envelope for Problem #2 located in the Department of Mathematics Office, Fayard 308 by 4:30 p.m., **Thursday, March 16**. No late papers will be accepted.

All papers with a correct solution will be entered in a drawing for a great prize!

Questions concerning the problem of the month should be sent to either Dr. Tilak de Alwis (tdealwis@selu.edu), or Dr. Randy Wills (rwills@selu.edu)

Problem:

Determine whether the following series is convergent or divergent. If convergent, find the exact sum.

$$\sum_{n=1}^{\infty} \frac{n}{(2n+1)!}$$