



# Lewis & Clark College

## Department of Mathematical Sciences

### Problem of the Week #8

(Spring 2018)

Evaluate the definite integral

$$\int_0^{\pi/4} \ln(1 + \tan x) \, dx.$$

Please mathematically justify your answer.

- Many thanks to Dr. Roger Nelsen for contributing this *Problem Of the Week*.
- Solvers should include their name, address, and status at the College. Solutions can be mailed to MSC 110 via campus mail or placed in Yung-Pin Chen's mailbox in the Math Department Office. Solutions to the above *Problem of the Week* should be received by 5:00 p.m. Monday, March 19, 2018.
- Mack Beveridge (sr.), Arthur Drobot (fr.), and Sam Raphael (so.) solved *Problem of the Week #7*. Congratulations to them.