

# Cal Poly Department of Mathematics

## Puzzle of the Week

Oct 30 - Nov 5, 2014

Compute, with justification, the value of

$$\lim_{x \rightarrow \infty} x \int_0^x e^{t^2 - x^2} dt$$

*Solutions should be submitted to Morgan Sherman:*

*Dept. of Mathematics, Cal Poly*

*Email: sherman1 -AT- calpoly.edu*

*Office: bldg 25 room 310*

*before next Thursday. Those with correct and complete solutions will have their names listed on the puzzle's web site (see below) as well as in next week's email announcement. Anybody is welcome to make a submission.*

<http://www.calpoly.edu/~sherman1/puzzleoftheweek>