



LEWIS AND CLARK COLLEGE

Department of Mathematical Sciences

PUZZLE OF THE WEEK (9/28/2016 - 10/4/2016)

Is it true that every positive integer can be represented as

$$\pm 1^2 \pm 2^2 \pm \dots \pm n^2$$

for some positive integer n and some choice of \pm signs? Justify your claim.

- Correct but not fully justified solutions of the Puzzle of the Week #4 were submitted by David Lovitz, Fisher Ng, and Sean Richardson. Nonetheless... congratulations!
- One possible solution of the Puzzle #4 is posted online. (Look for the Puzzle of the Week announcements on the departmental web-page.)
- Solvers of this week's puzzle should include their name, address, and status at the College. Solutions should be submitted to **Iva Stavrov** in BoDine 305; email submissions are encouraged (istavrov at lclark). Solutions should be received by the end of the day on **Tuesday, October 4th 2016**.