PROBLEM OF THE MONTH, NOVEMBER 2016

For a given positive integer n, we define the *ghost of n* to be the positive integer obtained by listing the digits of n twice. For example, the ghost of 2016 is 20162016. Similarly, the ghost of 891325 is 891325891325. Find a positive integer n with the property that its ghost is a perfect square.

Submit your solutions to professor Dan Ismailescu, Mathematics Department via email at dan.p.ismailescu@hofstra.edu, or bring it in person at 103C Roosevelt Hall.

Solution - Problem of the Month, October 2016

Congratulations to Leonard Arkhanhelskyi for solving correctly the October Problem!

(a) You are given a 11